

# Safe, Clean Water and Natural Flood Protection



## **A 15-year program to:**

- Ensure a safe, reliable water supply
- Reduce toxins, hazards and contaminants in waterways
- Protect water supply and dams from earthquakes and natural disasters
- Restore wildlife habitat and provide open space
- Provide flood protection to homes, schools and businesses

Santa Clara Valley  
Water District



# Safe, Clean Water and Natural Flood Protection



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**Santa Clara Valley  
Water District**

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*The Santa Clara Valley Water District manages an integrated water resources system that includes the supply of clean, safe water, flood protection, and stewardship of streams on behalf of Santa Clara County's 1.8 million residents.*

*The District effectively manages ten dams and surface water reservoirs, three water treatment plants, a state-of-the-art water quality laboratory, nearly 400 acres of groundwater recharge ponds and more than 275 miles of streams.*

*We provide wholesale water and groundwater management services to local municipalities and private water retailers who deliver drinking water directly to homes and businesses throughout Santa Clara County.*

*The mission of the District is to provide for a healthy, safe and enhanced quality of living in Santa Clara County through watershed stewardship and comprehensive management of water resources in a practical, cost-effective and environmentally sensitive manner for current and future generations.*

## Message from the CEO




You are holding in your hands the result of more than 18 months of community collaboration to create a long-term program that ensures Safe, Clean Water and Natural Flood Protection for Santa Clara County. As a service provider for the entire county, we at the Santa Clara Valley Water District know that the future of our families, neighborhoods and businesses depends on water and how well we manage it.

With the support of the community, the current Clean, Safe Creeks and Natural Flood Protection plan has accomplished many critical milestones to benefit residents. Nearly all of

the project performance measures in the 2000 plan are on track to be completed or exceeded. To date these include removing more than 4,200 pounds of mercury from local streams and the San Francisco Bay; preventing other pollutants, toxins and hazardous materials from affecting our local waterways; completing the Calabazas Creek Flood Protection Project under budget and ahead of schedule; adding access to over 66 miles of pedestrian-friendly (and wherever possible, bicycle-safe) public trails and open spaces, and restoring more than 569 acres of tidal and riparian habitat—more than five times the original goal.

The Clean, Safe Creeks funding approved by voters in 2000 has been critical to meet our area's needs—but this funding is set to expire in 2016 if voters elect to not renew it. At the same time, federal funding has diminished significantly in the past decade since the passage of the Clean, Safe Creeks plan. The fact is, long-term revenues are not enough to provide the urgently needed projects and programs that will help us meet the future water resource needs of our region.

Without continued funding there will be major reductions and the elimination of some services, including grants for environmental enhancement and trails. To ensure uninterrupted services, on July 24, 2012, the District Board of Directors decided to place a measure on the November ballot to renew the expiring parcel tax and help ensure the future quality, safety and supply of our local water resources. There would be no increase in the tax rate structure under the Safe, Clean Water measure, and this local funding for local projects could not be taken by the state.



The 15-year Safe, Clean Water and Natural Flood Protection program proposed in this report is based on input from more than 16,000 residents and stakeholders, and fulfills five top community priorities:

- Ensure a safe, reliable water supply for the future
- Reduce toxins, hazards and contaminants, such as mercury and pharmaceuticals, in our waterways
- Protect our water supply and local dams from the impacts of earthquakes and natural disasters
- Restore fish, bird and wildlife habitat; and provide open space access
- Provide flood protection to homes, businesses, schools, streets and highways

To ensure transparency and accountability, the Safe, Clean Water funding would be overseen by an external independent monitoring committee and all expenditures would be published annually. In addition, at least two professional audits of the program would be carried out during the 15-year period. The funding renewal would also include exemptions for low-income seniors, just as with the current Clean, Safe Creeks plan.

At the Santa Clara Valley Water District we are dedicated to delivering high quality services. In recognition of this, the District was the first water agency in the state to become certified by the International Organization for Standardization. Currently, only one other water agency has achieved this prestigious recognition for quality management.

With voter passage of Safe, Clean Water 2012 the District would continue to provide the levels of service that the community has come to expect, as well as add new projects to protect water quality, update and repair infrastructure, restore wildlife habitat and protect against flooding. I invite you to get involved in water resource management—please visit our website at [valleywater.org](http://valleywater.org) to find out more about what the District does, and how you can participate. Together, we can ensure that our county has a safe, reliable water supply for our present and future needs.

Sincerely,



Beau Goldie  
Chief Executive Officer,  
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# Acknowledgments

We are extremely grateful to the many community members, neighborhood groups, business owners, municipalities, advocacy groups, government officials, agencies, committees and other local organizations for giving their input, time and talent to help shape the Safe, Clean Water and Natural Flood Protection program. While space limitations prevent us from personally recognizing all those who gave input, we'd also like to thank the nearly 2,500 residents who took our online survey, many of whom left comments; the 11,000 community members who participated in our outreach activities; and all those who mailed letters, sent e-mails, or spoke at District meetings.

As the Safe, Clean Water program progresses we will continue to provide regular updates at open board meetings. We invite the ongoing participation of everyone in the community on this important program to secure water resources and ensure the future quality of life in Santa Clara County.

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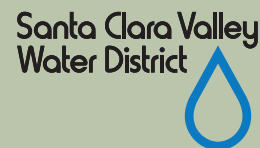
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## Acknowledgements i.

### Executive Summary 1.

Overview: the Safe, Clean Water program	1.1
Background: why Santa Clara County needs a renewed water services plan	1.2
Public outreach: how the program was formed	1.3
A program that fulfills community priorities	1.4
Safe, Clean Water five priorities	1.5
Funding Safe, Clean Water: transitioning from the old plan	1.6
Implementing the program: an ongoing process of refinement	1.8

### Background 2.

Safe, Clean Water program builds on success of previous Clean, Safe Creeks measure	2.1
Why it's time to update Santa Clara County's water services plan	2.2
Clean, Safe Creeks 2000 performance: accountability and transparency	2.3

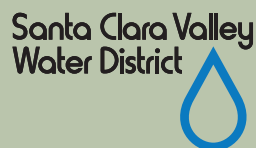
### Community Engagement 3.

How community engagement shaped the program	3.1
Outreach tools and techniques	3.2
Safe, Clean Water Outreach Schedule	3.3

### Introducing the Safe, Clean Water program 4.

#### Safe, Clean Water highlights 4.1

<b>Priority A: Ensure a safe, reliable water supply</b>	4.3
Project A1: Main Avenue and Madrone Pipeline Restoration	4.3
Project A2: Safe, Clean Water Partnerships and Grants	4.4
Project A3: Pipeline Reliability Project	4.5
What happens to Priority A Projects if the Safe, Clean Water Measure Doesn't Pass?	4.5
<b>Priority B: Reduce toxins, hazards and contaminants in our waterways</b>	4.6
B1: Impaired Water Bodies Improvement	4.6
B2: Interagency Urban Runoff Program	4.7
B3: Pollution Prevention Partnerships and Grants	4.8
B4: Good Neighbor Program: Illegal Encampment Cleanup	4.9



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B5: Hazardous Materials Management and Response	4.9
B6: Good Neighbor Program: Remove Graffiti and Litter	4.10
B7: Support Volunteer Cleanup Efforts and Education	4.11
What happens to Priority B Projects if the Safe, Clean Water Measure Doesn't Pass?	4.11

#### **Priority C: Protect our water supply from earthquakes and natural disasters**

C1: Anderson Dam Seismic Retrofit	4.12
C2: Emergency Response Upgrades	4.13
What happens to Priority B Projects if the Safe, Clean Water Measure Doesn't Pass?	4.13

#### **Priority D: Restore wildlife habitat and provide open space**

D1: Management of Revegetation Projects	4.14
D2: Revitalize Stream, Upland and Wetland Habitat	4.15
D3: Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails	4.15
D4: Fish Habitat and Passage Improvement	4.16
D5: Ecological Data Collection and Analysis	4.17
D6: Creek Restoration and Stabilization	4.18
D7: Partnerships for the Conservation of Habitat Lands	4.18
D8: South Bay Salt Ponds Restoration Partnership	4.19
What happens to Priority D Projects if the Safe, Clean Water Measure Doesn't Pass?	4.19

#### **Priority E: Provide flood protection to homes, businesses, schools and highways**

E1: Vegetation Control and Sediment Removal for Flood Protection	4.21
E2: Emergency Response Planning	4.22
E3: Flood Risk Reduction Studies	4.23
E4: Upper Penitencia Creek Flood Protection	4.25
E5: San Francisquito Creek Flood Protection	4.27
E6: Upper Llagas Creek Flood Protection	4.29
E7: San Francisco Bay Shoreline Study	4.31
E8: Upper Guadalupe River Flood Protection	4.33
What happens to Priority E Projects if the Safe, Clean Water Measure Doesn't Pass?	4.34

## Financing the program 5.

Financial highlights	5.1
Table 5-1 Parcel Tax Rates Comparison—No Change Under Proposed Program	5.2
Funding sources	5.4
Pay-as-you-go and debt financing for capital projects	5.7
Funding uses	5.8

## Implementing the program 6.

Implementation plans: a continual process of refinement	6.1
Transitioning from the Clean, Safe Creeks plan to the Safe, Clean Water program	6.2
Federal and State Partnerships	6.4
Role of the District Board of Directors	6.5
Role of the Independent Monitoring Committee	6.5

## — Appendices —

### Frequently asked questions A.

### Endorsements B.

### Clean, Safe Creeks 2000 performance C.

Outcome One: Homes, schools businesses and transportation networks are protected from flooding	C.1
Outcome Two: There is clean, safe water in our creeks and bays	C.4
Outcome Three: Creek and bay ecosystems are protected, enhanced or restored	C.4
Outcome Four: There are additional open spaces, trails and parks along creeks and in the watersheds	C.4

### Special tax rate structure D.

How the special tax is calculated	D.1
Land use categories and estimated stormwater runoff factors Special tax	D.1
calculation formula	D.2

### Election resolution and documents E.

Resolution 12-62 for tax continuation	E.1
Summary of Key Performance Indicators for the 15-year program	E.7
Resolution 12-63 calling for a special election	E.11

### Glossary F.

### Safe, Clean Water fold-out charts and map G.

Chart G-1: Safe, Clean Water Projects Summary	G.1
Priorities A and B	G.1

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Priorities C and D **G.2**

Priority E **G.3**

Chart G-2: Estimated Schedule for Safe, Clean Water Projects **G.4**

Countywide Map of Safe, Clean Water Projects **G.5**

## — Tables, charts and maps —

### Location of tables and charts

Table 1-1 Total Estimated Safe, Clean Water Funding	
Sources and Uses	<b>1.7</b>
Chart 3-1 Community Engagement Process	<b>3.2</b>
Chart 3-2 Safe, Clean Water Outreach Schedule	<b>3.3</b>
Table 4-1 Safe, Clean Water Estimated Costs by Priority	<b>4.2</b>
Table 5-1 Parcel Tax Rates Comparison—No Change	
Under Proposed Program	<b>5.2</b>
Chart 5-1: Safe, Clean Water Funding Sources	<b>5.4</b>
Table 5-2 Estimated Special Parcel Tax Revenue in 2014	
by Land Use Category	<b>5.5</b>
Chart 5-2 Capital Program Funding Sources:	
Estimated Pay-As-You-Go and Debt Financing	<b>5.7</b>
Table 5-3 Safe, Clean Water Estimated Costs by Priority	<b>5.8</b>
Table 5-4 Total Estimated Safe, Clean Water Funding	
Sources and Uses	<b>5.9</b>
Table 6-1 Transitioning Clean, Safe Creeks Projects to the	
Safe, Clean Water Program	<b>6.3</b>
Summary of Key Performance Indicators for the 15-Year Program	<b>E.9</b>
Chart G-1 Safe, Clean Water Projects Summary	<b>G.1</b>
Priorities A and B	<b>G.1</b>
Priorities C and D	<b>G.2</b>
Priority E	<b>G.3</b>
Chart G-2 Estimated Schedule for Safe, Clean Water Projects	<b>G.4</b>

### Location of Maps

E3: Flood Risk Reduction Studies	<b>4.24</b>
E4: Upper Penitencia Creek Flood Protection	<b>4.26</b>
E5: San Francisco Creek Flood Protection	<b>4.28</b>
E6: Upper Llagas Creek Flood Protection	<b>4.30</b>
E7: San Francisco Bay Shoreline Study	<b>4.32</b>
E8: Upper Guadalupe River Flood Protection	<b>4.34</b>
Countywide Map of Safe, Clean Water Projects	<b>G.5</b>

# Executive Summary

## Overview: the Safe, Clean Water program

Safe, Clean Water and Natural Flood Protection (Safe, Clean Water) is a 15-year program to help secure the present and future water resources of Santa Clara County. The program builds upon the success of its predecessor: the 15-year Clean, Safe Creeks and Natural Flood Protection plan (Clean, Safe Creeks). The plan is funded by a special parcel tax approved by two-thirds of voters in 2000, due to expire in June 2016. Nearly all of the project performance measures in the 2000 plan have been completed or exceeded, or they are on track to be completed or exceeded (For more information please see Appendix C, Clean, Safe Creeks Performance, and section two, Background).

In preparation for the sunset of the Clean, Safe Creeks plan, the Santa Clara Valley Water District (District) conducted a massive outreach program to elicit input and determine community priorities for a new program. The result of this effort is the updated Safe, Clean Water program contained in this report, which addresses the current five top community priorities: securing a safe, reliable water supply; protecting our water system from earthquakes and natural disasters; preventing contaminants from entering the water supply; restoring habitat for fish, birds and wildlife and increasing open space; and enhancing flood protection.

On July 24, 2012, the District Board of Directors voted to place the measure on the November 6, 2012 ballot to renew the expiring parcel tax. The passage of the Safe, Clean Water ballot measure would renew funding at the same parcel tax rate structure approved under the previous Clean, Safe Creeks plan, and ensure a seamless continuation of critical water-related services to Santa Clara County. Voter approval would help bring in over \$400 million in federal and state funds to build flood protection projects in high risk areas, as well as critical capital projects to maintain infrastructure. Since the parcel tax is for local projects, the State of California could not take funds to balance its own budget as it has in the past.

To ensure transparency and accountability, the District Board would appoint an Independent Monitoring Committee (IMC) of volunteers external to the District who would track progress and expenditures of the new program, and make recommendations to the Board of Directors (Board) as needed. The Board would also initiate

*The future of Santa Clara County's businesses, neighborhoods, families, environment and wildlife all depends on water. Safe, Clean Water provides a 15-year program to preserve and protect our quality of life.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Overview of the program

- Builds on success of the voter-approved 2000 Clean, Safe Creeks plan
- Based on 18 months of public outreach to evaluate current community priorities
- Continues vital existing services and adds new projects requested by community
- Passage would renew existing parcel tax at the same rate structure
- Local funding could not be taken by the state
- Independent monitoring of program with all expenditures published annually
- Helps bring in over \$400 million in federal and state funds for critical capital projects



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Why Santa Clara County needs a renewed plan now

- New local funding is needed to continue providing high-priority water resource services
- Federal funding has become increasingly unreliable and local funding is needed to make up for shortfalls
- Anderson Dam and Reservoir require mandatory earthquake retrofitting, and aging pipelines need upgrading to provide reliable water supply
- Completes flood protection that was funded only through planning and design under previous Clean, Safe Creeks plan
- Current regulatory requirements and new technologies need to be incorporated into a program
- Without new funding, vital services that improve drinking water quality, reduce contaminants, restore habitat, and provide flood protection will be reduced or eliminated



at least two professional, independent audits of the program during its 15-year duration. As with the Clean, Safe Creeks plan, all IMC, staff and auditor reports would be available for public viewing, and any updates or changes to the program would be made in publicly noticed meetings.

## Background: why Santa Clara County needs a renewed water services plan

When the District proposed the Clean, Safe Creeks special tax to voters in 2000, the plan included a 15-year sunset date. With the expiration of Clean, Safe Creeks approaching there are many reasons why an updated program is needed to secure water-related resources in Santa Clara County:

- **Community's top priority is reliable water supply**

The world has changed in many ways since voters approved Clean, Safe Creeks 12 years ago. During the District's intensive 18-month public outreach process to develop a new program, all surveys and input showed that community priorities have changed along with the times. In particular, there is an increased public awareness of water quality and supply issues, as well as the importance of conservation and recycling. Virtually all surveys showed that the current top priority for residents is to secure a safe, reliable water supply. New projects in the Safe, Clean Water program will help fill this need.

- **Local funding, local projects**

The economic downturn that occurred since the passage of Clean, Safe Creeks has caused federal funding to decrease and become much less reliable than when the measure was initiated in 2000. Two Clean, Safe Creeks flood protection projects—Upper Guadalupe River and Upper Llagas Creek—did not receive anticipated federal funds and require additional local funding to complete. While the District continues to pursue all possible sources of outside funding, communities everywhere must increasingly rely on local funding to construct local projects. Secure, local funding is more important than ever—even for projects that have financial partnering with the federal government or state.

- **Completing flood protection project**

The Clean, Safe Creeks plan funded planning and design for San Francisquito Creek flood protection. This project is now ready for construction, which would be completed with funding from the new program.



*Community priorities have changed since passage of the 2000 Clean, Safe Creeks plan—ensuring water reliability is a new top concern. The proposed Safe, Clean Water program includes earthquake retrofitting for Anderson Dam (shown here) which will improve safety and reliability, and restore the dam to its full operating capacity.*

- **Aging infrastructure**

Aging infrastructure needs repair and upgrades to meet local needs. This includes key facilities for water storage and conveyance.

- **New environmental requirements**

Program would incorporate the many new environmental and regulatory requirements instituted since 2000, as well as new technologies that can help meet them.

- **Loss of services**

Without funding to replace the expiring Clean, Safe Creeks parcel tax the District will be unable to address all of the new priorities that the community has requested, or maintain current levels of service for vital programs that reduce contaminants in our water supply, improve drinking water quality, conserve and restore wildlife habitat, create trails and open space, and provide critical flood protection.

## Public outreach: how the program was formed

The District is here to serve the community; accordingly, a significant effort was made to engage the public in developing this program. The Safe, Clean Water program evolved through an interactive process involving community input, District analysis and refinement, and District Board actions. During initial outreach the District used an extensive array of tools and techniques to obtain significant community input on the formation of the new program. Outreach tools included: mailers sent to every household in the county (approximately 661,000), a dedicated Safe, Clean Water website with online survey, three voter surveys reaching 2,200 residents, phone and door-to-door follow-up field surveys to 14,000 households, and other venues of engagement. To ensure equity, some surveys and informational materials were available in English, Spanish, Vietnamese and Chinese.

After the development of the draft program, the District conducted two Blue Ribbon Forums where community leaders gave critical review to help refine the program. Offsite stakeholders were able to participate in the forums through WebEx conferencing. After 18 months of extensive public engagement and intensive draft refinement, the new Safe, Clean Water program was finalized to go before local voters as a November ballot measure. For more details on the program's outreach process please see section three, *Community Engagement*.



*Community leaders participated in two Blue Ribbon Forums where they provided critical review and recommendations on the draft Safe, Clean Water program.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

*Over two dozen projects fulfill  
five community priorities:*

### **Projects in Priority A: Ensure a safe, reliable water supply**

- A1 Main Avenue and Madrone  
Pipelines Restoration**
- A2 Safe, Clean Water Partnerships  
and Grants**
- A3 Pipeline Reliability Project**

### **Projects in Priority B: Reduce toxins, hazards and contami- nants in our waterways**

- B1 Impaired Water Bodies  
Improvement**
- B2 Interagency Urban Runoff  
Program**
- B3 Pollution Prevention  
Partnerships and Grants**
- B4 Good Neighbor Program:  
Illegal Encampment Cleanup**
- B5 Hazardous Materials  
Management and Response**
- B6 Good Neighbor Program:  
Remove Graffiti and Litter**
- B7 Support Volunteer Cleanup  
Efforts and Education (Cont.)**



## A program that fulfills community priorities

Results from The District's outreach surveys and massive community engagement process showed that the current top-rated community priorities are:

- A. Ensure a safe, reliable water supply;
- B. Reduce toxins, hazards and contaminants in our waterways;
- C. Protect our water supply and dams from earthquakes and natural disasters;
- D. Restore wildlife habitat and provide open space; and
- E. Provide flood protection to homes, schools, businesses and highways.

The Safe, Clean Water and Natural Flood Protection program encompasses over two dozen projects grouped under these five community priorities. While projects are organized under these separate goals, they are actually all interrelated, multi-objective undertakings that work together to support all of the five priorities as a whole. For example, Priority D projects that restore wildlife habitat also reduce erosion and sedimentation and improve natural stream functions, which improve overall water quality and safety. The Anderson Dam Seismic Retrofit under Project C1 not only increases our water supply, it also ensures releases to support wildlife habitat downstream, and it protects downstream waterways from flooding. Flood protection projects under Priority E also reduce sedimentation and improve water quality, and some projects also improve habitat for endangered species, support fisheries, and create recreational opportunities.

The program includes new projects to fulfill new community priorities, as well as projects that continue vital water-related services from Clean, Safe Creeks. To address the community's new water supply and reliability concerns, the District added new elements to the program such as earthquake retrofitting of Anderson Dam, which is currently operating under safety restrictions. Retrofitting will restore the dam to its original storage capacity and help ensure an adequate water supply, which is especially important during drought years. Safe, Clean Water also includes upgrades to important drinking water conveyance systems to reduce down time during disaster recovery, as well as projects to increase water conservation and help improve water quality.

Flood protection capital projects in the program protect economically important urban areas and commuter transportation networks, as well as residential neighborhoods and agricultural land. Continued projects from Clean, Safe Creeks will maintain flood protection, clean up litter and graffiti, provide response for hazardous materials in creeks, reduce urban runoff, and restore fisheries and wildlife habitat.

*The new program leverages local resources by providing many grant and partnership opportunities for community cleanups, pollution prevention, watershed stewardship, habitat enhancement and more.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

Over two dozen projects fulfill  
five community priorities:

(From previous page)

**Projects in Priority C: Protect  
our water supply from earth-  
quakes and natural disasters**

- C1 Anderson Dam Seismic Retrofit**
- C2 Emergency Response Upgrades**

**Projects in Priority D:  
Restore wildlife habitat  
and provide open space**

- D1 Management of Revegetation  
Projects**
- D2 Revitalize Stream, Upland and  
Wetland Habitat**
- D3 Grants and Partnerships to  
Restore Wildlife Habitat and  
Provide Access to Trails**
- D4 Fish Habitat and Passage  
Improvement**
- D5 Ecological Data Collection and  
Analysis**
- D6 Creek Restoration and Stabi-  
lization**
- D7 Partnerships for the  
Conservation of Habitat Lands**
- D8 South Bay Salt Ponds  
Restoration Partnership (Cont.)**

The Safe, Clean Water program also increases money for grants and partnerships so that local community groups can complete more projects that benefit people, wildlife and the environment. These opportunities encourage proactive community action on water supply, runoff management, habitat restoration, trails and open space, pollution prevention, and more.

What follows is a summary list of the five Safe Clean Water priorities. Specific projects under each priority are listed in the sidebars. For detailed descriptions of projects under each priority please see section four, *Introducing the Safe, Clean Water program*. For an at-a-glance summary of all projects, please see Appendix fold-out Chart G-1. Appendix Chart G-2 covers anticipated scheduling for all projects, and Map G-3 shows project locations.

## Safe, Clean Water five priorities

### Priority A: Ensure a safe, reliable water supply

Projects under Priority A will upgrade aging water transmission systems to restore pipeline capacity and reduce the risk of water outages. The priority will also: provide grants to develop future conservation programs, help local schools fill state mandates for drinking water availability, and provide rebates on nitrate removal systems to improve water quality and safety for private well users.

### Priority B: Reduce toxins, hazards and contaminants in our waterways

Priority B uses multiple strategies to reduce and remove contaminants in our local creeks, streams and bay. In addition to mercury treatment systems in our reservoirs, this priority also helps reduce the amount of pollutants entering waterways in the first place by working with municipalities and other agencies to reduce runoff pollution. The District would also provide grants to reduce impacts from emerging contaminants, and support public education and volunteer cleanup efforts. Additional projects include coordinated cleanup of illegal encampments near waterways, trash and graffiti removal, and quick emergency response to hazardous materials spills.

### Priority C: Protect our water supply from earthquakes and natural disasters

Priority C includes partial funding to retrofit Anderson Dam and protect our water supply infrastructure from natural disasters such as earthquakes. It also includes emergency flood response enhancements to improve flood forecasting capabilities and help reduce damages from floods.

### Priority D: Restore wildlife habitat and provide open space

The eight projects under Priority D restore and protect vital wildlife habitat, improve water quality, and provide opportunities for increased access to trails and open space. Funding for this priority would pay for removal of non-native, invasive plants; revegetation of native species; maintenance of previously revegetated areas; removal of fish barriers; improvement of steelhead habitat; and stabilization of eroded creekbanks.



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

*Over two dozen projects fulfill  
five community priorities:*

*(From previous page)*

### Projects in Priority E: Provide Flood Protection to Homes, Businesses, Schools and Highways

- E1 Vegetation Control and Sediment Removal for Flood Protection**
- E2 Emergency Response Planning**
- E3 Flood Risk Reduction Studies**
- E4 Upper Penitencia Creek Flood Protection, Coyote Creek to Dorel Drive – San Jose**
- E5 San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto**
- E6 Upper Llagas Creek Flood Protection, Buena Vista Avenue to Wright Avenue – Morgan Hill, San Martin, Gilroy**
- E7 San Francisco Bay Shoreline Study – Milpitas, Mountain View, Palo Alto, San Jose, Santa Clara and Sunnyvale**
- E8 Upper Guadalupe River Flood Protection, Highway 280 to Blossom Hill Road – San Jose**



To support these and future restoration projects the District would create a comprehensive, updated database on stream conditions countywide. The District and other agencies could then use the new information to make informed decisions on where and how to use restoration dollars to provide the greatest value for wildlife.

### Priority E: Provide Flood Protection to Homes, Businesses, Schools and Highways

Flood protection measures under Priority E include capital construction projects, studies of flood prone areas, maintenance of existing flood protection channels, and improvements to emergency flood response.

Flood protection capital projects are prioritized to protect the largest number of people, homes, and businesses, as well as safeguard the highways, streets, public transportation and business centers that people depend on for their livelihoods. Flooding history, damage estimates, and economic impacts are all taken into consideration. All the construction projects under Priority E require federal funding for the preferred project, in addition to local funding. Whenever possible, the District also leverages funds from the state, local municipalities, and other stakeholders.

Priority E also provides ongoing maintenance for projects so that they continue to provide maximum flood protection. In addition, Emergency Response Planning minimizes damage from inevitable floods by allowing the District, local cities and the county to create action plans for flood prone sites.

### Funding Safe, Clean Water: transitioning from the old plan

Once voters approve the tax measure, the Safe, Clean Water program would replace the sunseting Clean, Safe Creeks plan in its entirety. Any tax payments collected for Clean, Safe Creeks would be used to continue corresponding projects under the new program which have comparable or expanded obligations. Funding collected for capital projects under Clean, Safe Creeks will be used to meet Clean,



*Priority D provides protection and restoration of habitats to support endangered species such as the steelhead trout, salt marsh harvest mouse, California clapper rail and California red-legged frog. Shown here is a recent District wetland restoration in the upper Pajaro watershed.*

Safe Creeks commitments under the new program by the same completion date. The only exceptions are the two flood protection projects which had to be modified and carried forward into the new program due to federal funding shortfalls. (For details, please see section four, *Introducing the Safe, Clean Water Program*.)

As a continuation of the existing plan, the Safe, Clean Water program would have parcel taxes assessed using the same rate structure as that under Clean, Safe Creeks, and would include exemptions for low-income seniors. As with Clean, Safe Creeks, the Safe, Clean Water program has a built-in sunset date with the tax ending in 15 years on June 30, 2028. Details on the parcel tax rate structure are provided in section five, *Financing the Program*, and in Appendix D, *Special Tax Rate Structure*.

The total \$720 million cost (in fiscal year 2012 dollars) of the entire Safe, Clean Water program would be funded primarily by the new voter-approved parcel tax (\$548 million), along with Clean, Safe Creek reserves to complete Clean, Safe Creeks projects (\$113 million), state reimbursements for federally approved flood protection projects (\$47 million), and interest earned on funds waiting to be used (\$12 million). **Table 1-1, Total Estimated Safe, Clean Water Funding Sources and Uses**, lists all estimated funding sources and all costs by priority, and shows that total funding sources is equal to the total cost of the program.

*Safe, Clean Water and Natural Flood Protection is balanced over the 15-year duration of the program. The total funding sources of \$720 million are equal to total funding uses.*

**Table 1-1 Total Estimated Safe, Clean Water Funding Sources and Uses**

	15-Year Estimated Total in Millions (2012 Dollars)	Percent of Total
Funding sources		
Special parcel tax revenue	\$548	76%
Beginning Clean, Safe Creeks reserves	\$113	16%
State reimbursements*	\$47	6%
Interest and miscellaneous	\$12	2%
<b>Total funding sources</b>	<b>\$720</b>	<b>100%</b>
Funding uses		
Safe, Clean Water program priorities		
A – Ensure a safe reliable water supply	\$15	
B – Reduce toxins, hazards and contaminants in our waterways	\$54	
C – Protect our water supply from earthquakes and natural disasters	\$48	
D – Restore wildlife habitat and provide open space	\$108	
E – Provide flood protection to homes, businesses, schools, and highways*	\$201	
Subtotal program priorities A thru E	\$426	59%
Planning and delivery	\$21	3%
Debt financing**	\$21	3%
Undesignated contingency	\$38	5%
Completing Clean, Safe Creeks 2000 Plan	\$214	30%
<b>Total funding uses</b>	<b>\$720</b>	<b>100%</b>

\*State reimbursements do not include \$20 million in anticipated subventions that are carried as a reduction to the Priority E Upper Llagas Creek project cost.

\*\*Cost of financing is the net of debt service of \$133 million less debt proceeds of \$112 million.

### Financing the program

The program would use a combination of debt financing and pay-as-you-go funding to pay for capital projects. Approximately 23 percent of capital projects cost would be funded through Certificates of Participation (COPs). COPs will help propel new Safe, Clean Water capital projects forward instead of waiting for tax revenue

to accumulate. Debt proceeds of \$112 million are planned for 2015. Debt service of \$133 million includes \$21 million interest plus the \$112 million principal borrowed.

The remaining 77 percent of capital costs for the Safe Clean Water program will be covered by pay-as-you-go financing. While this means that some construction will not begin until later in the 15-year program, planning and design of these projects will still move forward. For further details on Safe, Clean Water funding and the transition from the Clean, Safe Creeks plan, please see section five, *Financing the Program*.

### Implementing the program: an ongoing process of refinement

With the passage of the Safe, Clean Water program, the District would begin drafting the first of three implementation plans that would each cover five years of the 15-year measure. This strategy was suggested by independent auditors of the Clean, Safe, Creeks plan, to allow for adjustments to keep the program current with ongoing economic, policy and regulatory changes.

As each five-year plan proceeds, the Independent Monitoring Committee, District Board, and staff will continually share information so that all projects remain on-track, with adjustments as needed to ensure that key performance indicators are achieved on time and within budget. All decisions on the program would be carried out in publicly noticed District Board meetings which are also streamed live on the District website. For more information please see section six, *Implementing the Program*.

*The program would help bring in over \$400 million in federal and state funds to protect economic centers, transportation networks and neighborhoods from flooding, as well as repair and upgrade infrastructure.*

*Photo shows 2009 flooding in Morgan Hill from Llagas Creek.*



# Background

## Safe, Clean Water program builds on success of previous Clean, Safe Creeks measure

In 2000, Santa Clara County voters approved the Clean, Safe Creeks and Natural Flood Protection (Clean, Safe Creeks) special parcel tax, which funds projects that address community needs for enhanced stream stewardship and flood protection. The special tax supports projects that restore habitat, maintain healthy creek and bay ecosystems, improve water quality, reduce flood risks, and provide open space and recreational opportunities. To ensure accountability to the voters, the ballot measure also created an Independent Monitoring Committee to oversee the plan's progress and ensure that outcomes are met in a cost-effective manner.

Nearly all of the many high priority projects named in the 2000 measure have been completed or exceeded, or they are on track to be completed or exceeded. This includes all six flood protection projects that were entirely locally funded, and one of the three flood protection projects that are heavily dependent on federal funding. The remaining two federally funded projects did not receive anticipated funds to achieve their full project scopes, so they are on track to meet or exceed performance measures delineated for the less comprehensive "local funding only" scenario. These two projects are included in the Safe, Clean Water and Natural Flood Protection program (Safe, Clean Water) to receive additional local funding that will keep the full projects moving forward and ensure eligibility for federal money when it becomes available.

The Clean, Safe Creeks special tax is scheduled to sunset in June 2016, but without it the District cannot continue to provide the services that the community demands. In anticipation of the end of this special tax funding, the District began an intensive outreach effort in 2011 to reassess community priorities and formulate an updated program. An 18-month period of public input and program refinement resulted in this proposed Safe, Clean Water program, which includes new projects based on stakeholder input, as well as the continuation of important

*Without new funding, services that reduce contaminants in our creeks and bay will be cut back or eliminated. Here, a District chemist analyzes the quality of drinking water samples.*



### SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

#### Building on success: Clean, Safe Creeks milestones

- Nearly all Clean, Safe Creeks projects are completed or on track for completion
- Six locally funded flood protection projects are on schedule for completion within or below budget
- Removed 58,988 cubic yards of sediment from stream channels to maintain floodwater carrying capacity
- Removed 4,200 pounds of mercury from waterways and reduced other pollution sources (Cont.)



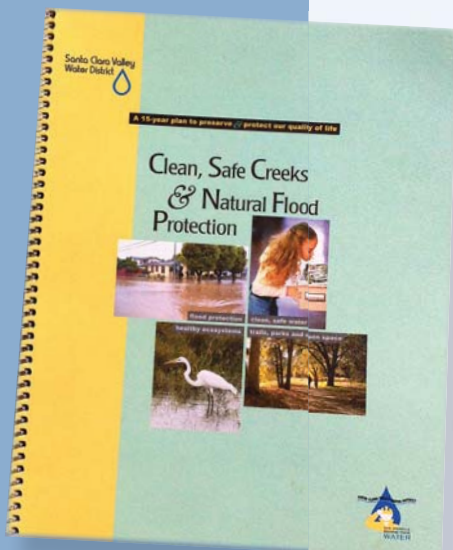


## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Building on success: Clean, Safe Creeks performance

(From previous page)

- **Met 100 percent of urgent response requests to clean up hazardous materials, litter and graffiti**
- **Conducted annual major cleanup events at 685 creek and stream locations**
- **Managed 15,240 acres of vegetation, exceeding target-to-date of 13,199 acres; on track for 22,000-acre goal**
- **Restored more than 569 acres of tidal and riparian habitat—more than five times the original 100-acre goal**
- **Partnerships provided 66.7 miles of trails/open space to date—on schedule to reach 70-mile goal**



Nearly all projects in the 2000 Clean, Safe Creeks plan have reached performance measures and are completed or on track for completion.



services that are currently being provided by Clean, Safe Creeks. To fund the new program, a special tax measure will appear on the November 2012 ballot. If passed, the Safe, Clean Water special tax will renew the expiring Clean, Safe Creeks tax with the same rate structure. The renewed local funding would become effective in July 2013, allowing for a seamless transition that builds on the successes of Clean, Safe Creeks.

## Why it's time to update Santa Clara County's water services plan

- After the sunset of the Clean, Safe Creeks parcel tax, there would be a significant drop in local funding. Without renewed funding some critical water programs will be greatly reduced or eliminated altogether. The most significant impacts will be a reduced ability to remediate impaired water bodies, improve water quality, respond to hazardous materials emergencies and provide flood protection and stream stewardship projects. Also, maintenance of existing infrastructure would be curtailed. Replacing the Clean, Safe Creeks plan would allow the District to continue the services that ensure safe, reliable drinking water, provide protection from floodwaters, and conserve and enhance the creek and bay environment.
- Not surprisingly, the needs and wants of stakeholders in Santa Clara County have changed since the voters approved the Clean, Safe Creeks plan more than a decade ago. Input from phone surveys, door-to-door surveys, online questionnaires, stakeholder meetings and many more venues shows that the community's top priorities now include securing a reliable water supply to meet the county's ongoing and future needs, and protecting water supply and dams from earthquakes and natural disasters. Other top priorities continue to be reducing toxins, hazards and contaminants in our creeks and bays; restoring wildlife habitat and providing trails and open space access; and protecting homes, schools, businesses and transportation networks from flooding. The Safe, Clean Water program has new projects to fulfill new priorities, as well as continued services from Clean, Safe Creeks to meet ongoing priorities.
- Some key facilities in the existing water storage and conveyance systems are decades old, too small or outdated to meet local needs, or need repair and upgrades. To meet the community's new water reliability priority, Safe, Clean Water includes upgrades of water supply pipelines, retrofitting of Anderson Dam to protect our water system from earthquakes and natural disasters, and programs to increase water conservation and water quality. Retrofitting the dam would meet safety standards and remove operating restrictions so it can once again function at maximum efficiency and provide more water for our community. The Safe, Clean Water special tax would fund a portion of cost to make all these needed repairs.



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Why Santa Clara County needs a renewed plan now

- During the current economic downturn, funding from the federal government has diminished and become unreliable. While the District will continue to pursue outside funding, additional local funding must be secured to make up for reduced federal contributions. The District needs to increasingly rely on local funding for local projects. The Safe, Clean Water special tax improves local control by reducing dependence on state and federal sources, and by allowing the District to issue bonds to ensure that urgently needed projects can be completed on time, without waiting for unreliable outside funding. These funds cannot be taken by the state, which has taken local tax revenues in the past to balance its own budget. In fact, this local funding would better enable the District to leverage dollars and be eligible for grants and other external funding. In this new economic climate, solving local issues requires a local approach, with local funding.
- The world is a different place since the passage of the Clean, Safe Creeks special tax in 2000. In addition to our state's budget problems, there are new government policies and new regulatory requirements to fulfill. At the same time, we have gained new knowledge and technologies to address environmental challenges. The Safe, Clean Water program addresses new regulatory and policy requirements such as water quality requirements, and supports new technologies to meet those requirements, such as mercury treatment systems.
- Although the sunset of Clean, Safe Creeks is a few years away, the District needs to plan ahead to implement long-term pollution control and safety programs, and provide an uninterrupted flow of services. Having a replacement special tax on the November 2012 ballot provides the lead time needed to seamlessly replace the Clean, Safe Creeks plan with the updated Safe, Clean Water program.

■ New local funding is needed to continue providing high-priority water resource services

■ Without new funding, vital services that improve drinking water quality, reduce contaminants, restore habitat, and provide flood protection will be reduced or eliminated

■ Anderson Dam and Reservoir require mandatory earthquake retrofitting (Cont.)

## Clean, Safe Creeks 2000 performance: accountability and transparency

The Clean, Safe Creeks plan receives oversight by an external Independent Monitoring Committee (IMC) comprised of community members, just as the proposed Safe, Clean Water program would be if passed. The Clean, Safe Creeks IMC holds public meetings and produces an annual report to provide spending oversight, track progress toward all outcomes, detail the plan's effectiveness, and provide recommendations for further progress.

The most recent IMC report released in January 2012 shows that nearly all the projects in the 2000 Clean, Safe Creeks plan have reached expected performance measures and are completed or on track for completion. This includes the six locally funded flood protection projects and one of the three federally funded projects. The remaining two projects that relied upon federal funding have been

"It is evident that the District is comprised of a high-performing team of professionals who can be characterized as: mission-driven, talented and hardworking, dedicated to achieving the [Clean, Safe Creeks] plan, and committed to transparency and good stewardship of public funding."

—from June 2012  
impartial audit of Clean,  
Safe Creeks plan by Moss  
Adams LLP



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Why Santa Clara County needs a renewed plan now

(From previous page)

- Aging pipelines and infrastructure need upgrading to provide reliable water supply
- Federal funding has become increasingly unreliable and local funding is needed to make up for shortfalls
- Recent regulatory requirements and new technologies need to be incorporated into a new program



delayed due to shortfalls: the Upper Guadalupe River and Upper Llagas Creek flood protection projects. However, both of those projects are on schedule to meet or exceed performance goals set for a “local funding only” scenario as delineated in the Clean, Safe Creeks plan. Specific information on these and other projects is provided in section four of this report, *Introducing the Safe, Clean Water Program*. A summary of the status of all Clean, Safe Creeks and Natural Flood Protection projects and outcomes is provided in Appendix C of this report. For more information on Clean, Safe Creeks progress and to view the latest IMC reports please visit the IMC web page at [valleywater.org/Programs/CleanSafeCreeksPlan.aspx](http://valleywater.org/Programs/CleanSafeCreeksPlan.aspx).

In addition to the IMC report, Clean Safe Creeks was audited by Moss Adams LLP in 2012, in accordance with Government Accountability Office Generally Accepted Governmental Auditing Standards. The audit found that the special tax was levied and collected in accordance with the provisions of Measure B (2000), that the tax proceeds were used correctly for the Clean, Safe Creeks plan, and that the District is on track to meet the majority of its key performance indicators. The auditors also made several recommendations which will be incorporated into the implementation of the Safe, Clean Water program. These include periodically updating the program as regulatory, economic and policy changes occur, and clearly defining the end-point, or completion definition, for each project in the program. The full audit can be found at [valleywater.org/About/TransparencyAccountability.aspx](http://valleywater.org/About/TransparencyAccountability.aspx).



*Grants and partnerships under Clean, Safe Creeks helped restore more than 569 acres of creekside and tidal habitat—five times the original goal. Here, consecutive photos show riparian restoration in Cupertino on Stevens Creek, an important spawning and rearing habitat for steelhead trout.*



# Community engagement

Beginning in March 2011, the District launched a wide-reaching engagement process to solicit ideas for a new program to replace Clean, Safe Creeks, which sunsets in 2016. It was critical that the program reflect the community's priorities and values, and balance the diverse and sometimes conflicting interests of stakeholders. To accomplish this goal, the District used a wide array of tools and techniques to engage approximately 16,000 residents, businesses and other stakeholders during an intensive 18-month period. To ensure fair representation, the District conducted outreach in all areas of the county, making sure to include historically underserved populations and providing surveys and informational materials in multiple languages.

## How community engagement shaped the program

The timeline shown in **Chart 3-2** on page 3.3 shows the many venues that the District used to gather input on the program, beginning with general voter surveys to identify top priorities, and moving on to door-to-door surveys, online surveys and focus groups.

From the initial surveys forward, all input collected showed that priorities had changed since the original Clean, Safe Creeks plan was developed in 2000. The numerous surveys consistently found the same top-tier priorities from all geographic areas of the community: securing a safe, reliable water supply; protecting our water system from earthquakes and natural disasters; and preventing contaminants from entering the water supply. The community also placed a high value on restoring habitat for fish, birds and wildlife, and increasing flood protection.

## Creating a fair and balanced program

Once the top community priorities were identified, the District evaluated needs in the District's long-term master plan and capital improvement program, and selected project elements to support each community priority. The District used a criteria-based ranking system to evaluate the benefits of proposed projects and programs and gave priority to those that: were critical to providing uninterrupted service; were highly desired by the community; leveraged outside funding, partnerships or volunteer resources; maintained existing levels of service; had a good cost to benefit ratio; supported mandatory regulatory requirements or legal obligations; benefited the most residents; and provided countywide equity.

To address the community's water supply priorities, the District added new elements to the proposed program. These include the upgrade and earthquake retrofitting of transmission pipelines and the Anderson Dam to protect our water system from natural disasters, and additional projects to increase water conservation. The new program also continues to support surface water quality improvement, increased flood protection, and habitat restoration.



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Community engagement process

- Three voter opinion surveys with 2,200 residents from all areas of Santa Clara County
- Phone and door-to-door field surveys of 14,000 residents in all areas of county to confirm voter survey results
- Four focus groups to identify community-preferred program elements
- Mailers sent to every household in Santa Clara County—approximately 661,000—with invitation to online survey  
(Cont.)



*The District engaged over 16,000 stakeholders during the outreach process through door-to-door, phone, and online surveys, as well as other venues.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Community engagement process

(From previous page)

- Two Blue Ribbon Forums with WebEx conferencing during which community leaders helped refine draft program
- Personal meetings with county officials and mayors of all cities
- Nearly 60 presentations to community organizations
- Regular updates to all District Board advisory committees
- Safe, Clean Water program updates during nine publicly noticed District Board meetings
- Numerous print and online publications about the new Safe, Clean Water program (see sidebar, page 3.5), including multilingual flyers

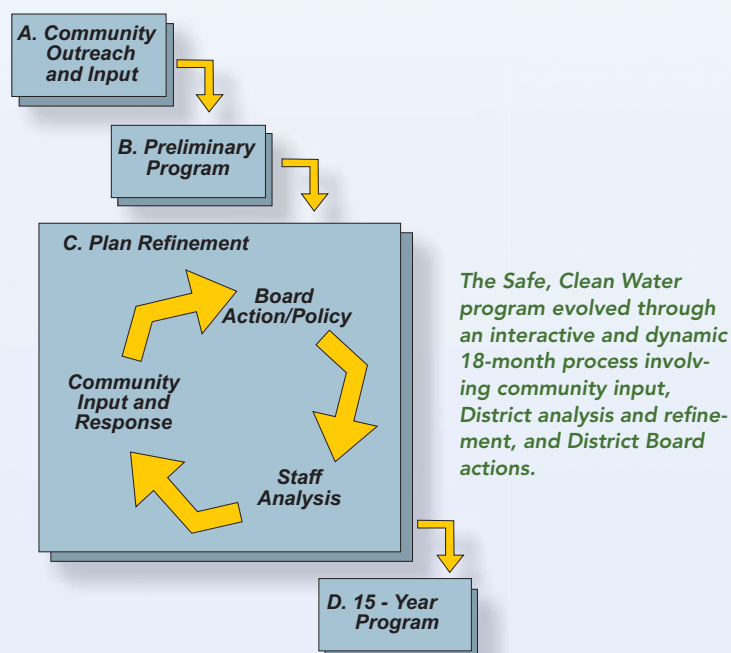
Once the Safe, Clean Water program was drafted, District staff introduced it to the community so that a wide variety of stakeholders could provide commentary. During the 10-month feedback period, the District conducted nearly 60 community presentations as well as two Blue Ribbon Forums in which community leaders from across the county gave critical review and recommendations. As shown in **Chart 3.1** below, the new program evolved through an interactive process involving community input, District analysis and refinement, and Board action. This process of input and refinement resulted in the 15-year Safe, Clean Water and Natural Flood Protection program, a measure which fulfills community needs and meets District obligations while at the same time providing economical water-related services in our region.

## Outreach tools and techniques

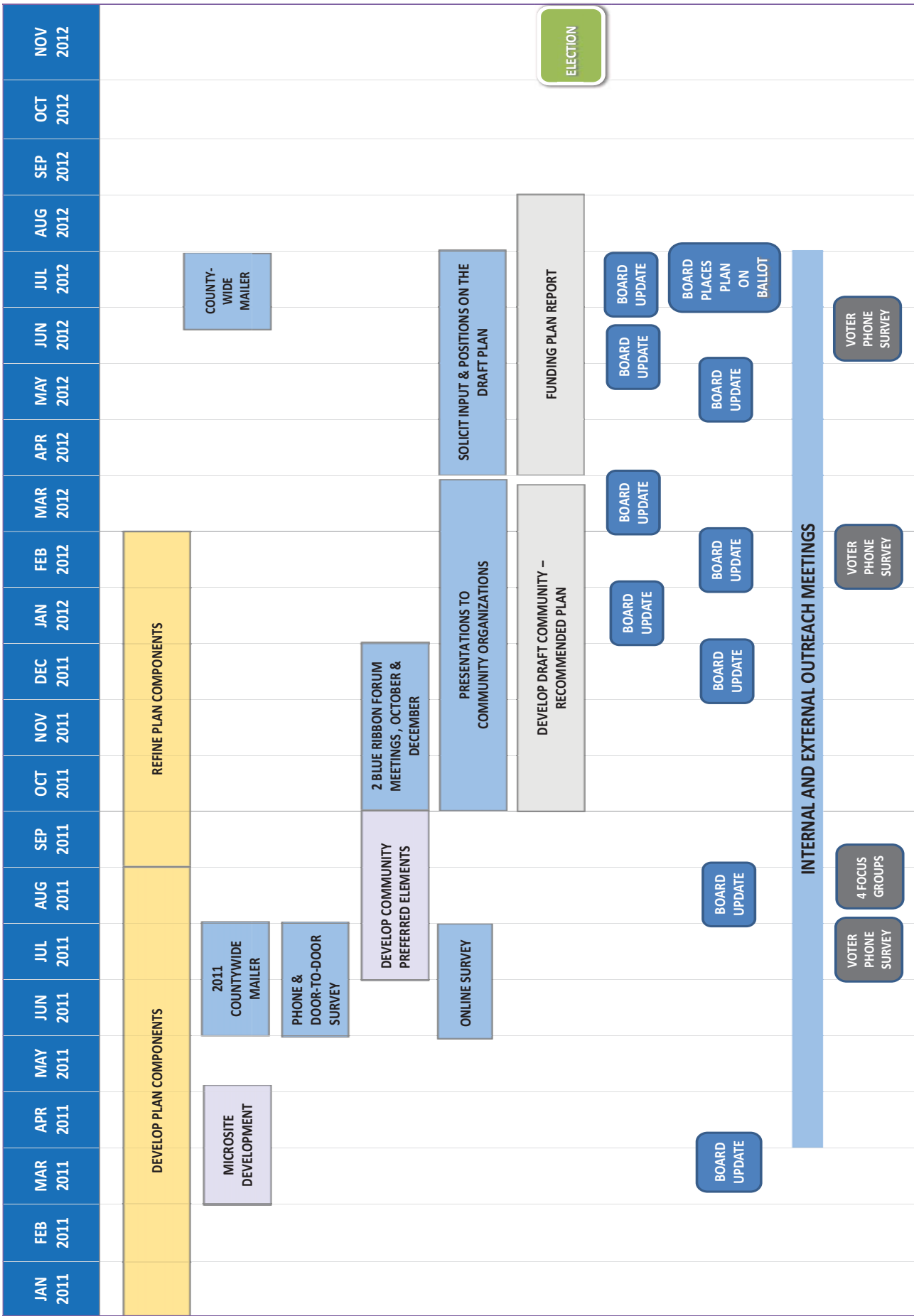
### Voter opinion scientific phone surveys

The District conducted three scientific voter opinion surveys between June 2011 and June 2012 consisting of 20-minute interviews with a total of 2,200 residents from all geographic areas of the county. To help ensure a representative sampling, some surveys were conducted in English, Spanish, Vietnamese and Chinese, and included both landline and cellular phones. Input was analyzed against previous surveys dating back to 1997. All the surveys showed by a large margin that the community's current top priority was a safe, reliable water supply. The second survey in February 2012 revealed that the majority of voters preferred to continue the tax rate at the current level rather than at a reduced rate that would cut services. A final phone survey was conducted in June 2012 to gather information for possible placement of the program on the November ballot.

Chart 3-1 Community Engagement Process



### Chart 3-2 Safe, Clean Water Outreach Schedule





## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Community engagement: who we contacted

- Mayors of all 15 Cities in Santa Clara County
- Santa Clara County Board of Supervisors
- Government agencies/representatives (114)
- Chambers of commerce (19)
- Environmental groups (24)
- Business associations (39)
- Ethnic organizations (18)
- Political organizations (18)
- School districts (38)
- Neighborhood associations (466)
- Other community organizations (41)

### Online survey and mailers

The District also invited all county residents to participate in an online survey through a user-friendly website at [safecleanwater.org](http://safecleanwater.org). In June and July 2011, every household in Santa Clara County received a mailer (approximately 661,000 total) informing residents about the Safe, Clean Water program and encouraging them to visit the site. Nearly 2,500 people took the online survey and offered comments. The survey was also promoted on the District's Facebook and Twitter social media sites.

### Phone and door-to-door field surveys

To independently validate findings from the voter opinion phone surveys, the District performed grassroots field surveys that targeted a larger and more diverse population sample. These phone and door-to-door surveys also served as follow-up calls to the online survey mailer to help ensure an effective response. During June and July 2011, interviewers surveyed approximately 11,000 county voters in-person and over the phone in every city of Santa Clara County, and in rural areas. Results from this larger sampling showed the same top water priorities as the voter opinion phone survey. To further engage the public, door-to-door interviewers left behind a flyer available in multiple languages.

### Focus groups

Following the phone and door-to-door surveys, the District conducted four focus groups to obtain a deeper understanding of which services the community preferred within each top priority. These two-hour workshops were carried out by trained moderators with a total of 60 participants representing the voting public in all areas of the county, both urban and rural. Input from focus groups helped the District refine the specific elements to be included under the five priorities of the Safe, Clean Water program.

To ensure fair representation, surveys and informational materials on the new program were available in English, Spanish, Vietnamese and Chinese.



## Blue Ribbon Forums

Once District staff developed a community-preferred draft program, it was presented to community leaders during two countywide Blue Ribbon Forums held in October and December of 2011. The forums were facilitated by the American Leadership Forum of Silicon Valley and attracted more than 60 participants each, representing a broad spectrum of interests including agriculture, recreation, open space, conservation and the environment, business interests, community organizations, ethnic organizations, municipalities, academia, and elected officials at the local, regional, state, and federal levels.

At the October forum, attendees participated in breakout discussion groups and provided comments and suggestions on the draft. During the December forum, staff returned with a revised draft that incorporated stakeholder input. Program additions included a \$500,000 grant to engage stakeholders in the development of a stream restoration priority list, and a rebate program for private well owners who purchase nitrate removal systems, as well as other additions and refinements. The revised program also included updated project descriptions, an outline of costs and benefits, and geographic locations of projects.

To facilitate broader participation during each forum, the District provided live WebEx conferencing which allowed off-site participants to engage in both the breakout sessions and larger group dialogue online. WebEx participants were also able to view presentations and ask questions of presenters and technical staff. Both forums were recorded and are available for viewing at [safecleanwater.org](http://safecleanwater.org).

## Presentations to community organizations

Throughout development of the draft program, the District provided presentations to nearly 60 community organizations, allowing another 1,250 people to provide input on the proposed program. District staff traveled to all areas of the county

*Community leaders participated in two Blue Ribbon Forums where they provided critical review and recommendations on the draft Safe, Clean Water program.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Community engagement: print and electronic outreach

- Dedicated program website at [safecleanwater.org](http://safecleanwater.org)
- Online survey with over 2,500 participants
- Safe, Clean Water information mailer sent to every county household
- Facebook and Twitter social media sites
- Safe, Clean Water program brochure  
(Cont.)



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Community engagement: print and electronic outreach

(From previous page)

- Annual District mailer sent to every county household
- Seventeen flyers tailored for specific cities, the county, businesses, neighborhoods and environmental groups
- Safe, Clean Water: 51 Questions and Answers from Blue Ribbon Forum
- Safe, Clean Water environmental projects brochure
- Tabling at community events
- E-mail updates to stakeholders and over 2,500 online survey participants
- Safe, Clean Water updates in District e-newsletter
- Surveys and informational flyers provided in English, Spanish, Vietnamese and Chinese
- Outreach to media



to meet with civic organizations, environmental groups, neighborhood associations, senior groups, business associations, and more. Please see the “Community Engagement: Who We Contacted” sidebar on page 3.4 for a complete listing.

### Outreach to community leaders and municipalities

The District contacted 174 government agencies and representatives, including elected members of our federal, state, regional, and local delegations and their staff. District staff also met personally with officials from all 15 area cities and the county, and made presentations at local city council meetings. Staff also contacted all area school districts, including each district’s board of trustees. In addition, the District published 17 specialized handouts outlining the benefits, projects and partnership opportunities that the new program offered to individual cities and the county, as well as neighborhoods, businesses and environmental groups.

### Presentations to board advisory committees

Staff provided regular project updates to community volunteers on the District’s eight advisory committees which provide advice and recommendations to the District Board on a wide range of policy and operational issues. Staff made presentations to the District’s four Flood Protection and Watershed Advisory Committees; the Environmental, Agricultural Water and Landscape Advisory Committees; and the Santa Clara Valley Water Commission. Staff also engaged the Clean, Safe Creeks Independent Monitoring Committee which monitors the finances and accomplishments of the existing Clean, Safe Creeks and Natural Flood Protection program.

### Public board meetings

Staff provided regular updates and received direction on the Safe, Clean Water program during nine public board meetings that occurred between March 2011 and July 2012. Meeting agendas are posted on the District website in advance so interested stakeholders can plan to provide input in-person, or watch the meeting online via real-time webcasting. All meetings are archived and can be viewed at [valleywater.org](http://valleywater.org).

### Print and electronic publications

Throughout the development of Safe, Clean Water, the District used many educational tools to disseminate information on the draft program, encourage input to the planning process, and inform the public about the Santa Clara Valley’s water resources functions. To reach as many residents as possible, neighborhood handouts were produced in English, Spanish, Vietnamese and Chinese. See sidebar for partial listing of Safe, Clean Water print and electronic outreach.

# Introducing the Safe, Clean Water program

Safe, Clean Water and Natural Flood Protection (Safe, Clean Water) is a 15-year program to help secure the present and future water resources of Santa Clara County. The program builds upon the success of its predecessor: the Clean, Safe Creeks and Natural Flood Protection plan (Clean, Safe Creeks), funded by a special parcel tax which was approved by two-thirds of voters in 2000.

## Safe, Clean Water highlights

Results from 18 months of outreach surveys and community engagement showed that current top community priorities were: securing a safe, reliable water supply; protecting our water system from earthquakes and natural disasters; preventing contaminants from entering the water supply; restoring habitat for fish, birds and wildlife and increasing open space; and enhancing flood protection. The new Safe, Clean Water program encompasses 28 projects grouped under these five top-rated community priorities.

### Prevents loss of important services and adds new top-priority projects

The program ensures that important services from Clean, Safe Creeks continue without interruption, and it adds new projects to address top-tier community priorities. To address the community's new water supply and reliability concerns the District added new elements to the program such as earthquake retrofitting of Anderson

Dam; this vital facility is currently operating under safety restrictions. Retrofitting will restore the dam to its original storage capacity and help ensure an adequate water supply, which is especially important during drought years. Safe, Clean Water also includes upgrades to important drinking water conveyance systems to reduce downtime during disaster recovery, as well as projects to increase water conservation and help improve water quality.

*Renewed funding from the Safe, Clean Water ballot measure would ensure that critical water services continue to support water quality, pollution reduction, flood protection, emergency response, stream stewardship and habitat restoration.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### The five priorities of the Safe, Clean Water program:

- A Ensure a safe, reliable water supply**
- B Reduce toxins, hazards and contaminants in our waterways**
- C Protect our water supply and dams from earthquakes and natural disasters**
- D Restore wildlife habitat and provide open space**
- E Provide flood protection to homes, schools, businesses and highways**



Without renewed funding, the District cannot maintain current levels of service or provide new, community-requested projects which would benefit all 1.8 million residents of Santa Clara County. Shown here is a sky-high view of the former Cargill salt production ponds, looking south over San Jose, Santa Clara and Milpitas. The Safe, Clean Water program would continue to help fund environmental restoration and flood protection efforts in this area.

Flood protection capital projects in the program protect economically important urban areas and commuter transportation networks, as well as residential neighborhoods and agricultural land.

Continued projects from Clean, Safe Creeks will maintain flood protection, clean up litter and graffiti, provide hazardous materials response, reduce urban runoff, and restore fisheries and wildlife habitat. The Safe, Clean Water program also increases seed money for grants and partnerships so that local community groups can complete more projects that benefit people, wildlife and the environment. These opportunities encourage proactive community action on water supply, runoff management, habitat restoration, trails and open space, pollution prevention, and more.

The following pages summarize all projects under the five priorities of the Safe, Clean Water program.

Table 4-1 Safe, Clean Water Estimated Costs By Priority		
Priority	15-Year Estimated Cost in Millions (2012 Dollars)	Percent of Total
A – Ensure a safe reliable water supply	\$15	4%
B – Reduce toxins, hazards and contaminants in our waterways	\$54	13%
C – Protect our water supply from earthquakes and natural disasters	\$48	11%
D – Restore wildlife habitat and provide open space	\$108	25%
E – Provide flood protection to homes, businesses, schools, and highways*	\$201	47%
TOTAL	\$426	100%
*Priority E does not include \$20 million of anticipated state subventions because this expected reimbursement has been deducted from the estimated Upper Llagas Creek project cost		

The Safe, Clean Water program delivers services and capital projects that fulfill five top-rated community priorities. For financial breakdowns by project please see the following pages in this section, or Appendix fold-out Chart G-1.



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project A1: Main Avenue and Madrone Pipelines Restoration

- Upgrade aging water transmission systems
- Restore carrying capacity of pipelines
- Increase groundwater recharge in South County
- Save energy and reduce operating costs
- Reduce CO<sub>2</sub> emissions

# Priority A: Ensure a safe, reliable water supply

Priority A will upgrade aging water transmission systems to increase pipeline capacity and reduce the risk of water outages following a catastrophic event. The Priority will also: provide grants to develop future conservation programs, help local schools fulfill state mandates for drinking water availability, and provide rebates on nitrate removal systems to improve water quality and safety for private well users.

## PROJECT A1 Main Avenue and Madrone Pipelines Restoration

This project will restore the Main Avenue and Madrone pipelines to full operating capacity of 37 cubic feet per second from Anderson Reservoir. The upgrade includes replacement of a one-mile section of pipe on the Main Avenue line which has been out of service since 1994, and restoration of approximately 1.25 miles of Madrone pipeline which has restricted capacity due to root intrusion and deterioration.

### Benefits

- Increases groundwater recharge by about 2,000 acre-feet per year in South County's Llagas Groundwater Sub-basin, a sufficient water supply for 4,000 families of five
- Improves operational flexibility
- Maximizes the delivery of imported water to treatment plants supplying drinking water to North County
- Saves energy, reduces operating costs, and cuts CO<sub>2</sub> emissions by reducing dependence on Coyote Pumping Plant

### Key performance indicators

1. Restore transmission pipelines to full operating capacity of 37 cubic feet per second from Anderson Reservoir.
2. Restore ability to deliver 20 cubic feet per second to Madrone Channel.

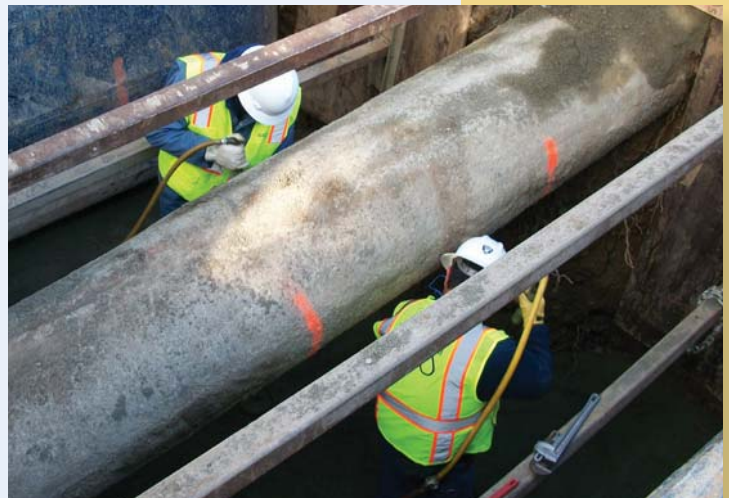
**Geographic area of benefit:** countywide

### Estimated funding from

**Safe, Clean Water:** \$5.4 million

**Estimated total project cost:** \$5.4 million

*Project A1 will repair a connection between South County and Anderson Reservoir, the largest surface water storage facility in the county. Shown here is a section of similar size pipeline.*





## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project A2: Safe, Clean Water Partnerships and Grants

- Provide grants for new water conservation projects
- Help schools provide safe, clean drinking water to students
- Provide rebates for private well water users to remove nitrates from drinking water

### Project A3: Pipeline Reliability Project

- Improve reliability of drinking water distribution pipelines
- Install line valves to reduce water outages during repairs and maintenance



## PROJECT A2 Safe, Clean Water Partnerships and Grants

Grants and partnerships covered under this project include:

- Grants for agencies and organizations to study and pilot-test new water conservation programs. In Fiscal Year 2010, county water conservation stood at 50,600 acre-feet, but this number needs to nearly double by 2030 to meet future demand.
- Grants to help schools in the county provide drinking water dispensers and other potable water devices for students. California Senate Bill 1413 requires that schools provide access to free, fresh drinking water during mealtimes in food service areas.
- Rebates to private well water users for the installation of point-of-use treatment systems to remove excess nitrate from their drinking water.

### Benefits

- Helps the District exceed the conservation goal of 98,500 acre-feet per year by 2030
- Reduces water demands and the need to invest in new or expanded water supply sources and associated infrastructure
- Increases water supply reliability
- Helps schools provide safe, clean drinking water to students and comply with state mandate
- Assists private well water users in maintaining the quality and safety of their drinking water



*Weather-based irrigation control systems are one of many tools that allow our county to achieve local water conservation goals. Grants in the proposed Safe, Clean Water program will promote the development of new projects and devices to further increase water conservation and ensure our future water supply.*



### Key performance indicators

1. Award up to \$1 million to test new conservation activities.
2. Increase number of schools in Santa Clara County in compliance with SB 1413 and the Healthy Hunger-Free Kids Act, regarding access to drinking water by awarding 100 percent of eligible grant requests for the installation of hydration stations; a maximum of 250 grants up to \$254,000.
3. Reduce number of private well water users exposed to nitrate above drinking water standards by awarding 100 percent of eligible rebate requests for the installation of nitrate removal systems; a maximum of 1,000 rebates up to \$702,000.



**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$2.2 million

**Estimated total project cost:** \$2.2 million

## PROJECT A3 Pipeline Reliability Project

This project constructs four line valves at various locations along the East, West and Snell treated water pipelines in Saratoga, Cupertino and San Jose. This will allow the District to isolate sections of pipelines for scheduled maintenance and repairs following a catastrophic event, such as a major earthquake.

### Benefits

- Supports shorter service interruption in the case of a pipeline break
- Provides operational flexibility for pipeline maintenance work
- Improves drinking water reliability

### Key performance indicator

1. Install 4 new line valves on treated water distribution pipelines.

**Geographic area of benefit:** Mountain View, Sunnyvale, Santa Clara, Cupertino, Saratoga, Los Gatos, Los Altos, Campbell, San Jose and Milpitas

**Estimated funding from Safe, Clean Water:** \$7.3 million

**Estimated total project cost:** \$7.3 million

### ***What happens to Priority A projects if the Safe, Clean Water measure does not pass?***

Pipeline rehabilitation and upgrades may be delayed or suspended indefinitely. Partnerships and grant projects will not occur.

*New line valves will allow the District to isolate sections of pipeline during repair and maintenance, which will reduce the risk of outages after a major earthquake.*



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# Priority B: Reduce toxins, hazards and contaminants in our waterways

Priority B uses multiple strategies to reduce and remove contaminants in our local creeks, streams and bay. In addition to mercury treatment systems in our reservoirs, this priority also prevents toxins from entering waterways in the first place by working with municipalities and other agencies to reduce runoff pollution. The District would also provide grants to reduce emerging contaminants and support public education and volunteer cleanup efforts. Additional projects include coordinated cleanup of illegal encampments near waterways, trash and graffiti removal, and rapid emergency response to hazardous materials spills.

## PROJECT B1 Impaired Water Bodies Improvement

This project would help the District meet surface water quality standards and reduce pollutants in streams, groundwater, lakes and reservoirs. Efforts would be carried out in compliance with the Regional Water Quality Control Board (RWQCB) Total Maximum Daily Loads (TMDLs) standards as they continue to evolve (TMDLs are the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards). Under this project the District would employ treatment systems in reservoirs to reduce methylation of mercury, and also help create realistic plans and expectations for reducing contaminant loads by engaging in the regulatory development process with the RWQCB for new and emerging contaminants.

### Benefits

- Reduces contamination in creeks and reservoirs
- Improves water quality, including water going to drinking water treatment plants
- Reduces mercury in reservoirs to prevent its entry into the food web
- Improves fisheries by reducing mercury contamination
- Supports regulatory compliance of TMDL standards affecting District operations

### Key performance indicators

1. Operate and maintain existing treatment systems in 4 reservoirs to remediate regulated contaminants, including mercury.
2. Prepare plan for the prioritization of pollution prevention and reduction activities.
3. Implement priority pollution prevention and reduction activities identified in the plan in 10 creeks.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$21 million

**Estimated total project cost:** \$21 million



**SAFE, CLEAN WATER AND  
NATURAL FLOOD PROTECTION**

**Priority B: Reduce toxins, hazards and contaminants in our waterways**

- B1 Impaired Water Bodies Improvement**
- B2 Interagency Urban Runoff Program**
- B3 Pollution Prevention Partnerships and Grants**
- B4 Good Neighbor Program: Illegal Encampment Cleanup**
- B5 Hazardous Materials Management and Response**
- B6 Good Neighbor Program: Remove Graffiti and Litter**
- B7 Support Volunteer Cleanup Efforts and Education**



*Because of mercury contamination the public is advised against consuming fish caught in some local reservoirs and ponds. Priority B would improve fisheries by reducing mercury loads.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project B1: Impaired Water Bodies Improvement

- Reservoir treatment systems to reduce mercury contamination and improve fisheries
- Compliance with regulatory safety standards for TMDLs
- Participation in regulatory development process for new and emerging contaminants

### Project B2: Interagency Urban Runoff Program

- Community partnerships to reduce runoff contaminants in surface water
- Compliance with regulatory requirements relating to stormwater
- Participation in regulatory development process for urban runoff pollution
- Public outreach and education



## PROJECT B2 Interagency Urban Runoff Program

This project supports the District's continued participation in Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and South County programs that help the District reduce stormwater pollution and meet regulatory requirements to reduce contaminants in surface water.

The District would also participate in the regulatory development process related to stormwater by providing review, analysis and commentary on various basin plan amendments, TMDLs and water bodies listed as impaired or threatened under the federal Clean Water Act. Project B2 also allows the District to maintain regional public education and outreach activities to help prevent urban runoff pollution at the source.

### Benefits

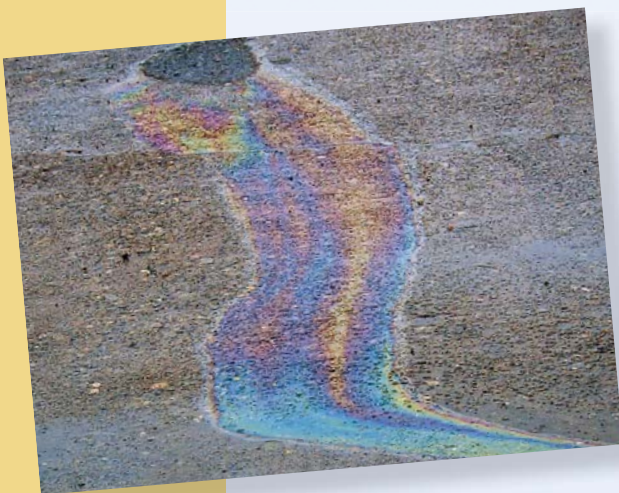
- Uses partnerships with municipalities and local agencies to reduce contaminants and improve surface water quality in our streams, reservoirs, lakes and wetlands
- Maintains District compliance with RWQCB and National Pollutant Discharge Elimination System (NPDES) permits
- Allows continued participation in SCVURPPP and South County urban runoff programs
- Promotes stormwater pollution prevention through public outreach

### Key performance indicators

1. Install at least 2 and operate 4 trash capture devices at stormwater outfalls in Santa Clara County.
2. Maintain partnerships with cities and County to address surface water quality improvements.
3. Support 5 pollution prevention activities to improve surface water quality in Santa Clara County either independently or collaboratively with south county organizations.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$11.4 million  
**Estimated total project cost:** \$34.4 million



*Oil leaked from a car begins its journey to the storm drain and local waterways. Project B2 provides public education to help prevent runoff pollution at the source.*



**SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION**

**Project B3: Pollution Prevention Partnerships and Grants**

- **Community partnerships and grants to reduce contaminants, household hazardous waste and trash in waterways**
- **Approximately \$500,000 in grants biennially for community pollution prevention projects**
- **\$200,000 annually for partnerships with local municipalities to reduce contaminants in surface water**
- **Public education and outreach to help prevent pollutants from entering waterways**

## PROJECT B3 Pollution Prevention Partnerships and Grants

This project would provide pollution prevention grants to qualified local agencies, nonprofit groups, schools, etc., totaling an average of \$500,000 per cycle. In addition, up to \$200,000 per year would go toward partnerships with municipalities for specific programs to reduce contaminants in surface or groundwater, and reduce emerging contaminants.

Grants could support programs such as public education to prevent pharmaceuticals from entering waterways, technical assistance to help growers protect groundwater, and partnerships to reduce litter and graffiti.

### Benefits

- Helps prevent contaminants such as pharmaceuticals, household hazardous waste and trash from entering our waterways
- Helps meet regulatory requirements as listed under the impaired water bodies listing of the federal Clean Water Act
- Reduces contaminant source loads in groundwater and surface water, and protects local watersheds
- Provides public education to reduce contaminants in our waterways
- Leverages community resources for efficient use of funds

### Key performance indicator

1. Provide 7 grant cycles and 5 partnerships that follow pre-established competitive criteria related to preventing or removing pollution.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$7.3 million

**Estimated total project cost:** \$7.3 million



*Pollution prevention partnerships and grants would fund projects that help keep pharmaceutical products and other toxic pollutants out of our waterways.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project B4: Good Neighbor Program – Illegal Encampment Cleanup

- Partner with local cities and agencies to clean up illegal encampments along waterways
- Reduce amount of trash and contaminants entering creeks
- Protect community investment in District facilities

### Project B5: Hazardous Materials Management and Response

- Maintain 24-hour-a-day, seven-day-a-week toll-free number for hazardous materials response
- Respond to spills within two hours of notification



*Illegal encampments harm habitats and pollute waterways. Multi-agency cleanup efforts would help protect our waterways and provide social service assistance.*

## PROJECT B4 Good Neighbor Program: Illegal Encampment Cleanup

This project supports the District's ongoing coordination with local cities and agencies to clean up large illegal creekside encampments that contaminate waterways and damage District facilities. This cooperative effort includes local police departments, social services, and nonprofit advocacy groups that help provide alternatives to homelessness.

### Benefits

- Reduces trash and other pollutant loads in surface water, including streams, reservoirs and wetlands
- Improves the aesthetics of creeks in neighborhoods and parks
- Coordinates efforts among multiple agencies to create lasting solutions

### Key performance indicator

1. Perform 52 annual cleanups for the duration of the Safe, Clean Water program to reduce the amount of trash and pollutants entering the streams.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$4.1 million

**Estimated total project cost:** \$4.1 million

## PROJECT B5 Hazardous Materials Management and Response

Project B5 would allow the District to continue providing a local, toll-free number to report hazardous materials spills 24 hours a day, seven days a week. Emergency staff responds within two hours of the initial report, with spill cleanup in District rights-of-way performed in a timely manner. Appropriate agencies are alerted when spills are outside District jurisdiction.

### Benefits

- Prevents and reduces contaminants in surface and groundwater
- Provide a quick, systematic emergency response that reduces negative impacts of hazardous materials spills

### Key performance indicator

1. Respond to 100 percent of hazardous materials reports requiring urgent on-site inspection in two hours or less.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$0.5 million

**Estimated total project cost:** \$3.3 million



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project B6: Good Neighbor Program: Remove Graffiti and Litter

- Respond to cleanup requests within five working days
- Provide quarterly cleanups of high-trash areas
- Improve aesthetics in neighborhoods and parks
- Reduce contaminants in local waterways and prevent dumping

## PROJECT B6 Good Neighbor Program: Remove Graffiti and Litter

This project would allow the District to continue responding to complaints about illegal dumping, trash and graffiti on District property and rights-of-way. Cleanup efforts include graffiti removal from headwalls, concrete embankments, signs, structures and other District assets, as well as maintaining, repairing and installing fences and gates so that District structures and facilities remain safe and clean. The project also includes quarterly cleanups of problem sites to help reduce waterway pollution and keep creeks and riparian areas free of debris.

### Benefits

- Reduces trash and contaminants in local waterways
- Improves the appearance of waterways in neighborhoods and parks by removing trash, graffiti and litter as well as illegally dumped items such as cars, shopping carts, appliances, etc.
- Reduces illegal dumping into or near waterways by repairing and installing fencing on District property
- Provides coordinated response to community complaints about trash and graffiti in neighborhoods

### Key performance indicators

1. Conduct 60 cleanup events (4 per year).
2. Respond to requests on litter or graffiti cleanup within 5 working days.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$7.8 million

**Estimated total project cost:** \$13.0 million

*This unsightly graffiti on a San Francisquito Creek embankment is no longer a blight thanks to the District's Good Neighbor Program. Funding for Priority B will cover continued cleanup of graffiti, litter and illegally dumped items in and around local waterways.*





## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project B7: Support Volunteer Cleanup Efforts and Education

- Provide grants and partnerships for watershed stewardship activities
- Support community cleanup events
- Leverage volunteer community resources
- Provide public education and outreach to support stream stewardship



## PROJECT B7 Support Volunteer Cleanup Efforts and Education

Project B7 provides grants and partnerships for cleanup, education, outreach and watershed stewardship activities. Funding would also allow the District to continue supporting volunteer cleanup activities such as National River Cleanup Day, California Coastal Cleanup Day, the Great American Pick Up, and Adopt-A-Creek, as well as Creek Connections Action Group and creekwise education.

### Benefits

- Reduces contaminants entering our waterways and groundwater
- Engages community, and supports watershed stewardship
- Leverages volunteer community resources for efficient use of funds

### Key performance indicator

1. Provide 7 grant cycles and 3 partnerships that follow pre-established competitive criteria related to cleanups, education and outreach, and stewardship activities.
2. Fund District support of annual National River Cleanup Day, California Coastal Cleanup Day, and the Great American Pick Up; and fund the Adopt-A-Creek program.

**Geographic area of benefit:** countywide



*Priority B would allow the District to continue its support of community cleanup activities which leverage volunteer labor to benefit the community and environment.*

**Estimated funding from Safe, Clean Water:** \$2.2 million

**Estimated total project cost:** \$2.2 million

### **What happens to Priority B projects if the Safe, Clean Water measure does not pass?**

Most of the elements in Priority B will have no funding if the proposed special tax does not pass. Partnerships and grants will not be available. Good Neighbor Programs such as trash, litter and graffiti removal will not be funded. Only specific mandated activities that fulfill legal and regulatory requirements will be funded, and this may cause reductions in other service areas.

# Priority C: Protect our water supply from earthquakes and natural disasters

Priority C includes retrofitting to protect our water supply infrastructure from the impacts of natural disasters like earthquakes. It also includes emergency flood response enhancements to improve communication between responders and help reduce damages from floods.

## PROJECT C1 Anderson Dam Seismic Retrofit

Anderson Reservoir is currently limited to 68 percent of its capacity due to seismic concerns, costing Santa Clara County valuable drinking water resources. This project would cover earthquake retrofitting of Anderson Dam to improve reliability and safety, and return the reservoir to its original storage capacity.

Anderson Dam creates the county's largest surface water reservoir—Anderson Reservoir—which stores local rainfall runoff and imported water from the Central Valley Project. The reservoir is an important water source for treatment plants and the recharge of the groundwater basin. Besides restoring drinking water supplies, the upgrade would also support compliance with environmental regulations. The District's regular reservoir releases ensure that downstream habitat has healthy flows and temperatures to sustain wildlife.

A breach of Anderson Dam at full capacity could have catastrophic consequences, including inundation of surrounding land more than 30 miles northwest to San Francisco Bay, and more than 40 miles southeast to Monterey Bay.

### Benefits

- Brings the dam into compliance with today's seismic standards
- Increases reliability and safety of our area's largest reservoir by protecting it from earthquakes
- Eliminates operational restrictions issued by the state Division of Safety of Dams which would restore Anderson Reservoir to its full capacity of approximately 30 billion gallons, regaining 32 percent or 9.3 billion gallons of water storage for our current and future supply
- Ensures compliance with environmental laws requiring reservoir releases that maintain appropriate flows and temperatures to support downstream wildlife habitat
- Minimizes the risk of uncontrollable releases from the reservoir which could cause downstream flooding

### Key performance indicator

1. Provide portion of funds, up to \$45 million, to help restore full operating reservoir capacity of 90,373 acre-feet.



**S**AFE, CLEAN WATER AND  
NATURAL FLOOD PROTECTION

### Project C1: Anderson Dam Seismic Retrofit

- Ensure reliability and safety of the county's largest reservoir
- Increase water supply by removing capacity restrictions on Anderson Reservoir
- Provide reservoir releases to support wildlife and habitat
- Protect downstream waterways from flooding



*Core sample drilling was part of the seismic studies which tested the integrity of Anderson Dam and Reservoir. Retrofitting is mandatory to remove safety restrictions and secure the continued operation of the largest surface water storage facility in Santa Clara County.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project C2: Emergency Response Upgrades

- Develop automated real-time flood warning system
- Reduce flood damage by allowing more time for emergency preparation
- Improve coordination of inter-agency response
- Improve accuracy of flood forecasting



**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$45 million

**Estimated total project cost:** \$110 million

## PROJECT C2 Emergency Response Upgrades

This project would cover the development of an automated flood warning system that uses real-time rainfall data to predict streamflows and potential flood risk. The system would efficiently disseminate information to emergency responders and the public using the web, texting, auto-calls, and other technologies, allowing more time to activate floodfighting measures and reduce flood damage.

### Benefits

- Enhances interagency response to storm-related emergencies
- Improves the accuracy of flood forecasting services
- Helps municipalities and neighborhoods lessen flood impacts
- Maintains access to technical resources that assist municipalities with floodplain management
- Promotes community awareness of flood risks
- Implements risk reduction strategies consistent with FEMA's Community Rating System as appropriate

### Key performance indicator

1. Map, install, and maintain gauging stations and computer software on seven flood-prone reaches to generate and disseminate flood warnings.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$2.7 million

**Estimated total project cost:** \$2.7 million



*Staff members practice emergency management skills during simulation exercises at the District's Emergency Operations Center. Emergency response upgrades under Priority C would improve coordinated flood response throughout Santa Clara County.*

### What happens to Priority C projects if the Safe, Clean Water measure does not pass?

The seismic retrofitting of Anderson Dam is required by law and will move forward even if the measure does not pass, but funding would have to be pulled from other District operations which may result in a reduction of services. The Emergency Response Upgrades project is fully funded by the measure and will not occur without passage.

# Priority D: Restore wildlife habitat and provide open space

The eight projects under Priority D restore and protect wildlife habitat and provide opportunities for increased access to trails and open space. Funding for this priority would pay for control of non-native, invasive plants, revegetation of native species, and maintenance of previously revegetated areas. Other projects include removal of fish barriers, improvement of steelhead habitat, and stabilization of eroded creekbanks.

To support these and future restoration projects the District would create a comprehensive, updated database on stream conditions countywide. The District and other agencies could then use the new information to make informed decisions on where and how to use restoration dollars so they have the greatest value for wildlife.

## PROJECT D1 Management of Revegetation Projects

This project supports District maintenance of at least 300 acres of existing revegetation projects throughout the five watersheds, and provides for maintenance of future revegetation sites. Funding for this project ensures that design objectives of all revegetation projects are maintained during the establishment period so that mitigation results in functional habitat that can support wildlife.

### Benefits

- Maintains 300 acres of existing revegetation
- Allows the District to monitor plant survival and habitat functions
- Complies with environmental laws requiring habitat mitigation for flood protection and water supply projects
- Provides for maintenance of future revegetation sites

### Key performance indicator

1. Maintain a minimum of 300 acres of revegetation projects annually to meet regulatory requirements and conditions.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$17.1 million

**Estimated total project cost:** \$29.5 million

*Maintaining plants until maturity ensures that they become a functioning part of the ecosystem. Photo shows the District's wetland creation project at Coyote Parkway Wetlands.*



**SAFE, CLEAN WATER AND  
NATURAL FLOOD PROTECTION**

### Priority D: Restore wildlife habitat and provide open space

**D1 Management of Revegetation Projects**

**D2 Revitalize Stream, Upland and Wetland Habitat**

**D3 Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails**

**D4 Fish Habitat and Passage Improvement**

**D5 Ecological Data Collection and Analysis**

**D6 Creek Restoration and Stabilization**

**D7 Partnerships for the Conservation of Habitat Lands**

**D8 South Bay Salt Ponds Restoration Partnership**



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project D1: Management of Revegetation Projects

- Maintain 300 acres of existing revegetation sites
- Support mandatory environmental mitigation requirements
- Help revegetation projects thrive to become functional habitat for wildlife

### Project D2: Revitalize Stream, Upland and Wetland Habitat

- Improve habitat by removing non-native, invasive plants and planting native species on at least 21 acres
- Increase connectivity of wildlife corridors



*Habitat improvement under Priority D would benefit numerous native bird, mammal, reptile and amphibian species, as well as threatened steelhead.*



## PROJECT D2 Revitalize Stream, Upland and Wetland Habitat

Project D2 allows the District to remove non-native, invasive plants, and revegetate habitat with native species when needed. Funding would also restore degraded habitat between revegetated sites to create a more contiguous habitat corridor for wildlife. This project includes targeted control of especially damaging non-native, invasive plant species such as *Arundo donax*, as well as education for nearby landowners and other stakeholder groups on the control of harmful species. Project D2 would also help implement the Stream Corridor Priority Plans developed in Project D3.

### Benefits

- Increases viability of native riparian species by reducing competition from non-native, invasive species
- Improves habitat by installing tidal and riparian plant species
- Improves ecological function of existing riparian and wetland habitat so it can support more diverse wildlife species
- Improves patchy wildlife corridors by increasing connectivity of habitat
- Increases community awareness about the damaging impact that non-native, invasive plants have on local ecosystems

### Key performance indicator

1. Revitalize at least 21 acres, guided by the 5 Stream Corridor Priority Plans, through native plant revegetation and removal of invasive exotic species.
2. Provide funding for revitalization of at least 7 of 21 acres through community partnerships.
3. Develop at least 2 plant palettes for use on revegetation projects to support birds and other wildlife.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$14.2 million

**Estimated total project cost:** \$23.9 million

## PROJECT D3 Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails

Project D3 provides grants and partnerships for activities such as developing Stream Corridor Priority Plans; creating or enhancing wetland, riparian and tidal marsh habitat; protecting special status species; removing fish migration barriers; installing fish ladders; removing non-native, invasive plant species; and planting native species. The project includes seven grant cycles, one held approximately every other year during the 15-year duration of the Safe, Clean Water program, as well as funding for partnerships that restore stream and wetland habitat and provide open space access.



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project D3: Grants and Partnerships to Restore Wildlife Habitat and Provide Access to Trails

- Leverage community resources to restore and create stream, wetland and tidal marsh habitat; and provide access to open space and trails
- Provide seven biennial grant cycles for habitat restoration
- Develop a priority list of stream restoration projects

### Project D4: Fish Habitat and Passage Improvement

- Improve steelhead trout habitat and migration routes, including planning and design of two creek/lake separations
- Perform studies of steelhead streams
- Develop program to use large woody debris to create fish habitat

This project would also fund work that provides access to creekside trails or trails that provide a significant link to the creekside trail network, for example, the possible construction of a bridge over Coyote Creek in the Rockspring neighborhood.

#### Benefits

- Enhances creek and bay ecosystems
- Improves fish passage and habitat
- Expands trail and open space access
- Leverages community funding through grants
- Increases collaborations and partnerships for stewardship activities with cities, the county, nonprofit organizations, schools and other stakeholders

#### Key performance indicators

1. Develop five Stream Corridor Priority Plans to prioritize stream restoration activities.
2. Provide 7 grant cycles and additional partnerships for \$21 million that follow pre-established criteria related to the creation or restoration of wetlands, riparian habitat, and favorable stream conditions for fisheries and wildlife, and providing new public access to trails.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$23.5 million

**Estimated total project cost:** \$23.5 million

## PROJECT D4 Fish Habitat and Passage Improvement

This project would help restore and maintain healthy steelhead trout populations by improving fish passage and habitat. Possible work sites include Alamitos Creek at Lake Almaden and Ogier Ponds in the Coyote watershed, where man-made creek alterations disrupt fish migration. The project also includes studies of steelhead streams throughout the county to determine where improvements are needed to support spawning, rearing and migration. Funding would also pay for the development of a program to use large woody debris to create fish habitat.

#### Benefits

- Improves spawning and rearing habitat within the Coyote, Guadalupe and other watersheds
- Improves steelhead trout habitat
- Helps provide required mitigation for environmental impacts of reservoir and recharge operations

#### Key Performance Indicators

1. Complete planning and design for two creek/lake separations.
2. Construct one creek/lake separation project in partnership with local agencies.



*Project D4 would improve passage for threatened steelhead. Here, a fish migrates through the Alamitos fish ladder installed by the District on the upper Guadalupe River in 1999.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project D5: Ecological Data Collection and Analysis

- Create comprehensive, ongoing database to track stream conditions in all watersheds in Santa Clara County
- Integrate District's stewardship actions across operations
- Improve effectiveness of restoration decisions and projects with more accurate data

### Project D6: Creek Restoration and Stabilization

- Stabilize eroding creekbanks and reduce sedimentation
- Reduce maintenance costs for sediment removal and protect infrastructure from damage
- Improve natural stream functions



*Project D5 would track stream conditions throughout the county to increase the effectiveness of restoration decisions and projects.*

3. Use \$6 million for fish passage improvements.
4. Conduct study of all major steelhead streams in the County to identify priority locations for installation of large woody debris and gravel as appropriate.
5. Install large woody debris and/or gravel at a minimum of 5 sites (1 per each of 5 major watersheds).

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$21.0 million

**Estimated total project cost:** \$24.5 million

## PROJECT D5 Ecological Data Collection and Analysis

This project would create a comprehensive watershed database that tracks stream ecosystem conditions to help the District and other county agencies and organizations make informed watershed and asset management decisions. This new information would integrate and enhance the District's stewardship actions through a standardized, repeatable and defensible approach that guides, organizes and integrates information on stream conditions.

This ecological monitoring and assessment will be conducted on an ongoing basis, and will be shared with land use agencies, environmental resource groups and the public to support efficient restoration decisions throughout the county.

### Benefits

- Improves watershed and asset management decisions
- Provides a systematic, scientific guide for decisions and actions to improve stream conditions
- Supports effective design options for capital projects
  - Maximizes the impact of restoration dollars with more reliable data on countywide stream conditions

### Key performance indicators

1. Establish new or track existing ecological levels of service for streams in 5 watersheds.
2. Reassess streams in 5 watersheds to determine if ecological levels of service are maintained or improved.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$7.0 million

**Estimated total project cost:** \$10.5 million



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project D7: Partnerships for the Conservation of Habitat Lands

- Provide up to \$8 million for purchase of conservation lands
- Pool mitigation dollars with other agencies to create larger habitat lands for wildlife
- Assist recovery of special status species
- Provide mitigation for future water supply and flood protection projects

## PROJECT D6 Creek Restoration and Stabilization

This project would use geomorphic data to design and construct projects to increase the stability of eroding creekbanks and help restore the natural functions of stream channels. Possible work may include the removal of Comer Debris Basin on Calabazas Creek in Saratoga, and activities to reduce and prevent incision and promote sediment balance in Stevens and Uvas Creeks.

### Benefits

- Uses scientific principles to restore sediment balance and reduce erosion, instability and sedimentation in creeks
- Helps restore stream functions and improves recharge capability of channels by decreasing sedimentation
- Protects roads from damage caused by eroding channel banks
- Reduces annual maintenance cost for sediment removal

### Key performance indicator

1. Construct 3 geomorphic designed projects to restore stability and stream function by preventing incision and promoting sediment balance throughout the watershed.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$12.8 million

**Estimated total project cost:** \$12.8 million

## PROJECT D7 Partnerships for the Conservation of Habitat Lands

Funding from this project would help the community acquire important habitat land to preserve local ecosystems. The project supports implementation of the Valley Habitat Plan, a multi-agency agreement that pools mitigation dollars to purchase large areas of habitat land for conservation.

### Benefits

- Fulfills a portion of the District's acre allocation to the Valley Habitat Plan
- Protects, enhances and restores natural resources in Santa Clara County
- Contributes to the recovery of special status species
- Coordinates regional mitigation projects to create larger, less fragmented conservation lands that are more beneficial for wildlife and the environment
- Provides for endangered species and wetlands mitigation for future water supply and flood protection projects

### Key performance indicator

1. Provide up to \$8 million for the acquisition of property for the conservation of habitat lands.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$8.0 million

**Estimated total project cost:** \$24.0 million



*Erosion and incision like this example along Thompson Creek degrade habitat values and increase sediment loads and maintenance costs.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project D8: South Bay Salt Ponds Restoration Partnership

- Partner with U.S. Fish and Wildlife Service to accelerate progress on South Bay Salt Ponds Restoration
- Reuse local stream sediments to build and rehabilitate tidal habitat
- Reduce disposal costs for sediment removal and increase available landfill space

*Photos show salt ponds before and after their restoration to tidal wetland. Project D8 uses stream sediment to restore wetland habitat while at the same time reducing sediment disposal costs.*



## PROJECT D8 South Bay Salt Ponds Restoration Partnership

Project D8 would reuse local sediment from streams flowing into San Francisco Bay to create and rehabilitate habitat in the South Bay Salt Ponds Restoration. The District would reuse sediment that has to be removed from streams to maintain their capacity to carry floodwaters. In partnership with the U.S. Fish and Wildlife Service, the clean sediment would be applied to appropriate locations to improve the success of the South Bay Salt Ponds Restoration effort.

### Benefits

- Accelerates progress of an important tidal wetland restoration project
- Reduces disposal costs for sediment that has been removed from local channels to maintain flood carrying capacity
- Increases space availability in local landfills

### Key Performance Indicators

1. Establish agreement with the U.S. Fish and Wildlife Service to reuse sediment at locations to improve the success of Salt Pond restoration activities.
2. Construct site improvements up to \$4 million to allow for transportation and placement of future sediment.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$4.2 million

**Estimated total project cost:** \$4.2 million

### What happens to Priority D projects if the Safe, Clean Water measure does not pass?

Many of the projects in this priority will not be funded at all if the proposed special tax does not pass. Partnerships and grant projects will not occur and most activities will be severely curtailed. Only mandated activities will be funded and these will be at the minimally acceptable levels. Fulfilling mandated requirements may also cause reductions in other District service areas.



# Priority E: Provide flood protection to homes, businesses, schools, and highways

Flood protection measures under Priority E include capital construction projects, studies of flood prone areas, maintenance of existing flood protection channels, and improvements in emergency planning for flood response.

Flood protection capital projects are prioritized to protect the largest number of people, homes and businesses, as well as safeguard the highways, streets, public transportation, and business centers that people depend on for their livelihoods. Flooding history, damage estimates, and economic impacts are all taken into consideration. Five of the eight projects under this priority are capital projects, and three are continued from the 2000 Clean, Safe Creeks plan. All the construction projects under Priority E require federal funding for completion in addition to local funding. Whenever possible the District leverages funds from the state, local municipalities, and other stakeholders. Capital projects E4 through E8 are already in the preliminary stages of design, and costs shown are the best estimates to date.

Priority E also provides for ongoing maintenance so that projects continue to provide the level of flood protection for which they were designed. In addition, Emergency Response Planning will reduce damage from inevitable floods by allowing the District, local cities, and the county to create action plans for flood prone sites.



*Besides safeguarding neighborhoods, capital projects under Priority E would protect commuter transportation networks that support livelihoods and the economy. Photo shows Highway 87 and adjacent light rail lines inundated with floodwaters in 1995. Project E8 would protect this area from flooding.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Priority E: Provide Flood Protection to Homes, Businesses, Schools and Highways

- E1 Vegetation Control and Sediment Removal for Flood Protection
- E2 Emergency Response Planning
- E3 Flood Risk Reduction Studies
- E4 Upper Penitencia Creek Flood Protection, Coyote Creek to Dorel Drive – San Jose
- E5 San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto
- E6 Upper Llagas Creek Flood Protection, Buena Vista Avenue to Wright Avenue – Morgan Hill, San Martin, Gilroy
- E7 San Francisco Bay Shoreline Study– Milpitas, Mountain View, Palo Alto, San Jose, Santa Clara and Sunnyvale
- E8 Upper Guadalupe River Flood Protection, Highway 280 to Blossom Hill Road – San Jose



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project E1: Vegetation Control and Sediment Removal for Flood Protection

- Maintain conveyance capacity of existing flood protection projects
- Fund maintenance of projects that will be completed under Safe, Clean Water program
- Remove in-stream vegetation and sediment as appropriate
- Perform weed abatement in compliance with fire codes

"On behalf of all my neighbors, I would like to thank you and your organization for cleaning out Llagas Creek when you did . . . If Llagas Creek had not been cleaned out . . . flooding and damage to our homes and property would have been more likely to occur."

—excerpt from letter written by a resident after the District cleared non-native plants from Llagas Creek before March 2011 storms and flooding

## PROJECT E1 Vegetation Control and Sediment Removal for Flood Protection

This project supports the District's ongoing vegetation control and sediment removal activities that reduce flood risk by maintaining design conveyance capacity of flood protection projects. These activities also provide access for maintenance personnel and equipment. The project includes: controlling in-stream vegetation growth, removing sediment at appropriate intervals, removing hazardous trees, and performing weed abatement and pruning to provide access and establish firebreaks. Before carrying out in-stream maintenance, District personnel perform biological pre-construction surveys to minimize environmental impacts. Allocations for Project E1 would also help fund future maintenance of flood protection projects completed under the Safe, Clean Water program.

### Benefits

- Ensures that existing flood protection projects continue to provide maximum flood protection
- Provides safe access for maintenance of creek channels
- Reduces fire risk along creeks and maintains compliance with fire codes
- Improves water quality

### Key performance indicators

1. Maintain 90 percent of improved channels at design capacity.
2. Provide vegetation management for 6,120 acres along levee and maintenance roads.

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$35.6 million

**Estimated total project cost:** \$111.1 million

Personnel remove accumulated sediment from a Ross Creek culvert to maintain the channel's floodwater carrying capacity.





## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project E2: Emergency Response Planning

- Improve interagency response to flood events
- Develop communication procedures and web information
- Develop site-specific flood-fighting action plans for five watersheds
- Coordinate public outreach for uniform emergency messages

## PROJECT E2 Emergency Response Planning

This project allows the District to work with local municipalities to clearly identify roles and responsibilities for floodplain management and flood emergency management. The project would support countywide emergency response and preparedness activities, and it would develop communication procedures and disseminate web-based flood forecasting information developed under Project C2, Emergency Response Upgrades. Collaborators would also develop formal, site-specific flood-fighting strategies and coordinate outreach throughout the county so that the public receives uniform flood warning messages.

### Benefits

- Reduces flood damage
- Provides effective coordinated response to storm-related emergencies
- Improves community awareness about flood risks

### Key performance indicators

1. Coordinate with agencies to incorporate District-endorsed flood emergency procedures into their Emergency Operations Center plans.
2. Complete 5 flood-fighting action plans (one per major watershed).

**Geographic area of benefit:** countywide

**Estimated funding from Safe, Clean Water:** \$3.1 million

**Estimated total project cost:** \$3.1 million

*Project E2 would develop floodfighting action plans to improve emergency response. Here, personnel deploy a bladder dam during a practice drill to protect neighborhoods near the upper Guadalupe River.*





## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project E3: Flood Risk Reduction Studies

- Perform hydrological, hydraulic, and geotechnical studies on seven creek reaches
- Develop risk management strategies for four flood-prone areas in San Jose and Milpitas
- Update floodplain maps using scientific data and new FEMA guidelines

*Scientific studies could help the District secure future grants and partnerships to prevent devastating events like this one in 1998, when Calera Creek flooded Milpitas.*



## PROJECT E3 Flood Risk Reduction Studies

This project would develop engineering studies to increase understanding of flood risks in high priority, flood-prone areas, and develop options for managing those risks. The studies will focus on four areas:

- The Rockspring neighborhood along Coyote Creek in San Jose;
- Alamitos Creek, upstream of Lake Almaden in San Jose;
- Calera Creek, from Milpitas High School to Interstate 680 in Milpitas; and
- tributaries to Lower Silver Creek (Ruby, Norwood, Quimby and Fowler Creeks) in San Jose.

Studies would include hydrologic, hydraulic and geotechnical data, and remapping work of the floodplain areas. If appropriate, updated maps would be submitted to the Federal Emergency Management Agency (FEMA) to more accurately reflect the floodplain.

### Flooding history and project background

In 1997, the Rockspring neighborhood suffered severe flood damages to approximately 25 low-income apartment buildings. A subsequent study investigated the flooding problem and offered possible solutions. With the additional planning and partial design from Project E3, the District would be well-positioned to apply for future grants and/or partnerships to complete the needed flood protection work in this neighborhood.

Alamitos and Calera Creeks were modified with levees and floodwalls about 30 years ago, but their designs do not meet current FEMA guidelines which were published after the projects were built. Both the Alamitos and Calera neighborhoods are mapped as regulatory floodplains. In 2012, FEMA released new draft technical guidance for mapping floodplains behind levees; these new guidelines may significantly reduce the size of the regulatory floodplains for Alamitos and Calera Creeks, but a study is needed to qualify for updated regulatory mapping.

Every winter, thousands of households, schools and businesses in San Jose are susceptible to flood damage in the Lower Silver Creek watershed. While the District is improving the flood carrying capacity of Lower Silver Creek itself, the smaller tributaries continue to pose a flood risk. Project E3 would map and quantify these flood risks and identify possible solutions that may also provide environmental or recreational benefits.

### Benefits

- Provides more accurate mapping of areas at risk of flooding
- May remove hundreds of parcels from FEMA regulatory floodplain, based on updated mapping standards
- Information can be integrated into flood warning program to provide advance, real-time warnings of impending flood events
- Provides technical basis for developing future flood protection plans, and for potential funding partnerships



## Key performance indicators

1. Complete engineering studies on 7 creek reaches to address 1 percent flood risk.
2. Update floodplain maps on a minimum of 2 creek reaches in accordance with new FEMA standards.

**Geographic area of benefit:** Milpitas and San Jose

**Estimated funding from Safe, Clean Water:** \$7.9 million

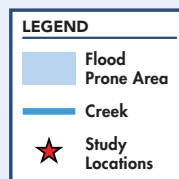
**Estimated total project cost:** \$7.9 million



Twenty-five low-income apartment buildings in the Rockspring neighborhood suffered severe flood damages when Coyote Creek spilled its banks in 1997.



Studies under project E3 will remap flood-plains and provide design solutions for high-risk areas of San Jose and Milpitas.





## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project E4: Upper Penitencia Creek Flood Protection, Coyote Creek to Dorel Drive – San Jose

- Partner with U.S. Army Corps of Engineers and the state to construct flood protection along 4.2 miles of creek
- Provide 100-year flood protection to approximately 5,000 homes, schools and businesses
- Protect proposed site of new rapid transit station
- Improve water quality and reduce sedimentation
- Preserve natural creek channel and adjacent park and recreation lands

*Upper Penitencia Creek has flooded at least seven times since 1967. Damages from a 100-year flood are estimated at \$455 million.*



## PROJECT E4 Upper Penitencia Creek Flood Protection, Coyote Creek to Dorel Drive – San Jose

### Preferred project: A federal-state-local partnership

This project continues a partnership with the U.S. Army Corps of Engineers (Corps) to plan, design and construct improvements along 4.2 miles of Upper Penitencia Creek from the confluence with Coyote Creek to Dorel Drive. The project will also be funded in partnership with the state. Part of the project must be completed prior to a planned Silicon Valley Rapid Transit extension to the Bay Area Rapid Transit line, to protect the area around the proposed Berryessa station near King Road which would otherwise be subject to flooding.

The natural creek channel would be preserved while adjacent existing open space and parkland would remain as recreational areas, only rarely acting as a temporary floodplain so that floodwaters do not enter surrounding neighborhoods and commercial areas. Proposed construction measures may include modified floodplains, levees, flood walls, bypass channels, and fish passage improvements. Existing District water supply facilities may also be modified to protect habitat and improve water supply reliability.

The \$41.9 million in local funding from Safe, Clean Water would allow the District to move ahead with the planning, design and construction of the project. Without local funding, work will not proceed beyond the currently funded feasibility planning stage.

### Flooding history and project background

Upper Penitencia is a major tributary of Coyote Creek, flowing westerly from Alum Rock Park through the residential neighborhoods of Berryessa and Alum Rock in San Jose. More than 5,000 homes, schools and businesses are located in this floodplain, including many high-tech and commercial industries supporting the greater Silicon Valley.

With the capacity to carry less than a 10-year event, Upper Penitencia Creek has spilled its banks at least seven times since the District began preparing flood reports in 1967. Damaging flood events occurred in 1978, 1980, 1982, 1983, 1986, 1995, and 1998, impacting many homes, businesses and surface streets.

Potential damages from a 100-year flood event are estimated at \$455 million (in 2004 dollars, according to a Corps economic analysis), with average annual damages estimated at \$30.5 million for the full reach from the Coyote Creek confluence to Dorel Drive.

The preferred project would build on a 1981 tri-party agreement between the District, the City of San Jose, and Santa Clara County to preserve open land and provide flood protection along the Upper Penitencia Creek corridor. As a result of the agreement, 78 acres have been permanently preserved as Penitencia Creek County Park and Penitencia Creek Trail. A four-mile, intermittent trail follows Upper Penitencia Creek from 700-acre Alum Rock Regional Park to its confluence with Coyote Creek. In addition to much-needed flood protection, this project will help provide the opportunity for the City of San Jose and Santa Clara County to complete the long-planned trail and linear park.

## Benefits

- Preferred project provides 100-year flood protection to approximately 5,000 homes, schools and businesses. Locally-funded-only project provides 100-year flood protection to the proposed rapid transit station and areas downstream from King Road
- Reduces sedimentation and maintenance requirements
- Improves water quality in Coyote Creek
- Provides opportunities for recreation improvements consistent with the City of San Jose and Santa Clara County Park master plans

## Key performance indicators

1. **Preferred project with federal and local funding:** Construct a flood protection project to provide 1 percent flood protection to 5,000 homes, businesses and public buildings.
2. **With local funding only:** Acquire all necessary rights-of-way and construct a 1 percent flood protection project from Coyote Creek confluence to King Road.

*This is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, if local funding alone is available, the project will be reduced in scope. Each year in its annual review of the Safe, Clean Water program, the District Board will assess the funding status and determine the appropriate strategy to follow.*

## What if no federal funding is available?

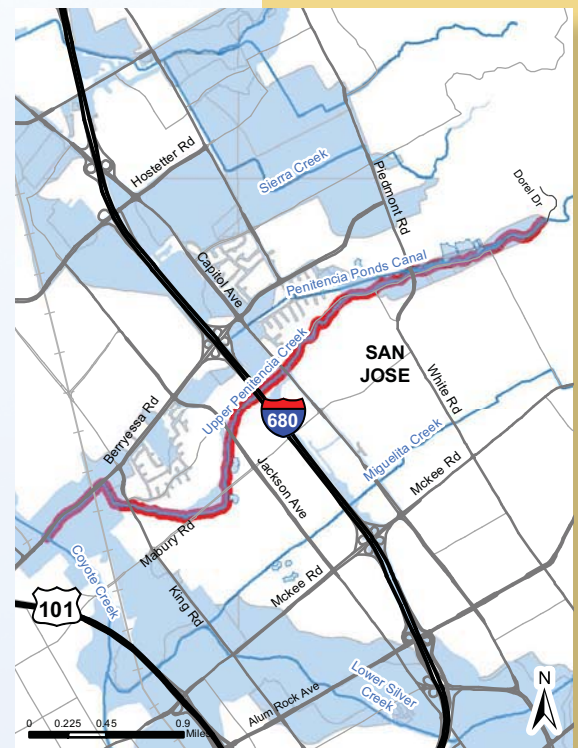
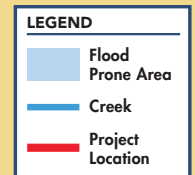
The federally authorized project is the preferred project. However, if only local funding alone is available, the project would be narrowed in scope to construct the downstream-most reach, which would provide 1 percent level of protection from the confluence of Coyote Creek to King Road. This would protect the future rapid transit station and neighboring areas. Funding for the local-only plan would also be used to secure required property for the full project reach (to Dorel Drive), in anticipation of future federal funding that would allow construction of the full project.

**Geographic area of benefit:** San Jose

**Estimated funding from Safe, Clean Water:** \$41.9 million

**Estimated total project cost:** \$139.5 million\*

*\*The \$97.6 million in additional funds required to complete the project are comprised of: previous District expenditures and federal funding from the Corps (previous and anticipated). This project is eligible for state subvention reimbursements. However, subvention funds are uncertain and have not been accounted for in the finances of the Safe, Clean Water program.*



*The Upper Penitencia project would construct improvements along 4.2 miles of the creek from the confluence with Coyote Creek to Dorel Drive.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project E5: San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto

- Protect approximately 3,000 parcels from flooding
- Leverage funding through cost shares and grants
- Reduce bank erosion and sedimentation
- Improve habitat for steelhead and other endangered species
- Improve stream water quality
- Identify areas to integrate recreational opportunities

*The 1998 flooding of San Francisquito Creek closed Highway 101 and caused an estimated \$28 million in damages.*



## PROJECT E5 San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto

### Preferred project: A federal-state-local partnership

This project would complete construction of setback levees and floodwalls from San Francisco Bay to Highway 101 to provide 100-year flood protection and ecosystem benefits. Upstream of Highway 101 the project would provide 1 percent flood protection, ecosystem protection and recreational benefits.

The work would remedy channel constrictions and modify bridges at University Avenue, Newell Road, Middlefield Road and Pope/Chaucer Street. The project is sponsored by the San Francisquito Creek Joint Powers Authority, of which the District is a member agency, in partnership with the U.S. Army Corps of Engineers (Corps). The project builds on the planning and design tasks initiated as part of the Clean, Safe Creeks plan, which are on track to be completed.

### Flooding history and project background

San Francisquito Creek is one of the last continuous riparian corridors on the San Francisco Peninsula, and is also home to one of the few remaining viable steelhead trout runs. The creek can cause severe flood damage with very little warning and has overflowed seven times since 1910.

During the February 1998 El Niño event, record flooding caused an estimated \$28 million in damages in Palo Alto, East Palo Alto and Menlo Park. More than 1,100 homes were flooded in Palo Alto, and Highway 101 was closed, as were numerous other roadways. The largest flood on record prior to 1998 occurred in December of 1955 when the creek overtopped its banks in several locations, inundating about 1,200 acres of commercial and residential property. Damages were estimated at nearly \$2 million in 1956 dollars. Total damages from a 100-year flood event are estimated at \$300 million in Santa Clara and San Mateo Counties, as calculated by the Corps in 2011.

### Benefits

- Provides 1 percent flood protection for approximately 3,000 homes and businesses in Palo Alto
- Reduces bank erosion and sedimentation-related impacts along San Francisquito Creek
- Provides new or improved habitats for endangered species
- Improves water quality
- Enhances recreational opportunities for the community
- Leverages dollars via cost-shares and grants from the State Department of Water Resources and the California Department of Transportation

### Key performance indicators

1. **Preferred project with federal and local funding:** Protect more than 3,000 parcels by providing 1 percent flood protection.
2. **With local funding only:** Protect approximately 3,000 parcels from flooding (100-year protection downstream of Highway 101, and 50-year protection upstream of Highway 101).

This is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, if local funding alone is available, the project will be reduced in scope. Each year in its annual review of the Safe, Clean Water program, the District Board will assess the funding status and determine the appropriate strategy to follow.

### What if no federal funding is available?

The local-funding-only project will be the same as the preferred project downstream of Highway 101, but upstream of Highway 101 it will provide 2 percent (50-year) flood protection, rather than 1 percent (100-year) protection to approximately 3,000 parcels in Palo Alto.

**Geographic area of benefit:** Palo Alto

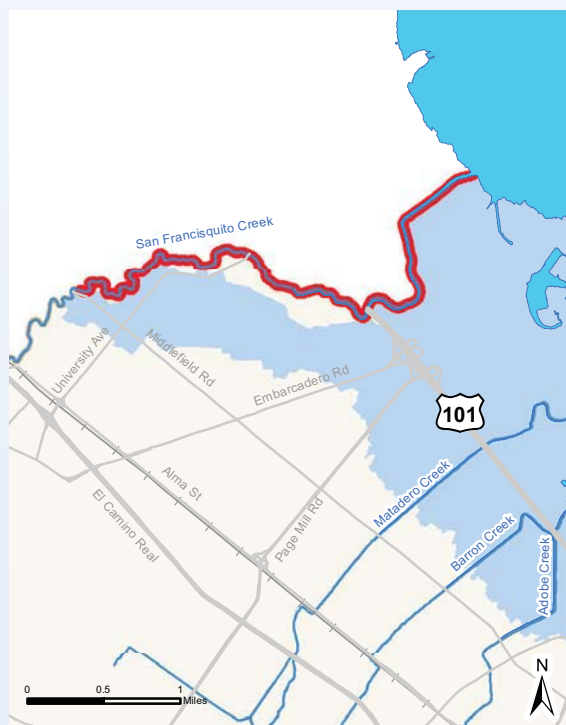
**Estimated funding from Safe, Clean Water:** \$35.5 million

**Estimated total project cost:** \$128 million\*

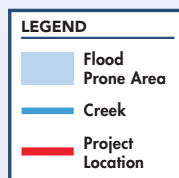
\*The \$92.5 million in additional funds required to complete the project are comprised of: previous District expenditures under the Clean, Safe Creeks plan, state grant funds and local partnerships under the JPA, and anticipated federal funding from the Corps. This project may be eligible for state subvention reimbursements. However, subvention funds are uncertain and have not been accounted for in the finances of the Safe, Clean Water program.



A debris deflector protrudes up from beneath the Bayshore Freeway bridge, where it prevents the accumulation of flood debris that can block water flow and cause flooding to nearby homes. The facing page photo shows debris accumulating at this same bridge before the deflector was installed.



The preferred project will provide 1 percent flood protection from San Francisco Bay to Middlefield Road in Palo Alto.

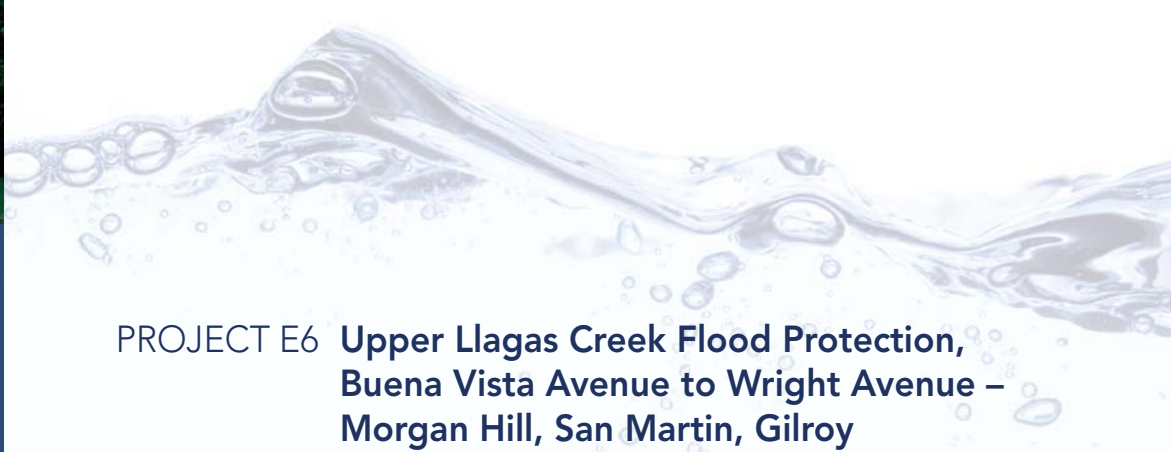




## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project E6: Upper Llagas Creek Flood Protection, Buena Vista Avenue to Wright Avenue – Morgan Hill, San Martin, Gilroy

- Construct flood protection improvements along 12.5 miles of channel
- Provide 100-year flood protection for approximately 1,100 homes and 500 businesses in downtown Morgan Hill
- Provide 10-year flood protection to approximately 1,300 agricultural acres in Morgan Hill, Gilroy and San Martin
- Identify opportunities to integrate recreational opportunities
- Improve stream habitat and support fisheries



## PROJECT E6 Upper Llagas Creek Flood Protection, Buena Vista Avenue to Wright Avenue – Morgan Hill, San Martin, Gilroy

### Preferred project: a federal-state-local partnership

This project continues a Clean, Safe Creeks project in partnership with the U.S. Army Corps of Engineers (Corps) and the state to plan, design, and construct improvements along 12.5 miles of channel extending from Buena Vista Avenue to Wright Avenue, including West Little Llagas Creek in downtown Morgan Hill. The federally authorized preferred project protects the urban area of Morgan Hill from a 1 percent flood, and reduces the frequency of flooding in surrounding areas. Construction would include channel modifications and replacement of road crossings. The District will continue to work with Congress to aggressively pursue federal funds to bring this project to full fruition.

### Flooding history and project background

The area sustained damage in 1937, 1955, 1958, 1962, 1963, 1969, 1982, 1986, 1996, 1997, 1998, 2002, 2004, 2008, 2009 and 2011. In 2009, many businesses and residences in downtown Morgan Hill were flooded under one foot of water. The project builds on the planning, design and property acquisition initiated under the Clean, Safe Creeks plan of 2000, which, along with limited construction, are on schedule for completion.

### Benefits

- Preferred project provides 100-year flood capacity for four miles of channel in downtown Morgan Hill, protecting approximately 1,100 homes and 500 businesses
- Preferred project provides up to 10-year flood protection to approximately 1,300 agricultural acres in Morgan Hill, Gilroy and San Martin
- Locally-funded-only project provides 100-year flood protection for a limited number of homes and businesses in Morgan Hill
  - Improves stream habitat and fisheries
  - Creates additional wetlands
  - Improves stream water quality
  - Identifies opportunities to integrate recreation improvements with the City of Morgan Hill and others as appropriate



*Photo shows flooding along Monterey Road in Morgan Hill in 2009. Channel modifications on the Upper Llagas would provide protection up to a 100-year flood.*

## Key performance indicators

1. **Preferred project with federal and local funding:** Provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat.
2. **With local funding only:** Provide 100-year flood protection for Reach 7 only (up to W. Dunne Avenue in Morgan Hill). A limited number of homes and businesses will be protected.

*This is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, if local funding alone is available, the project will be reduced in scope. Each year in its annual review of the Safe, Clean Water program, the District Board will assess the funding status and determine the appropriate strategy to follow.*

## What if no federal funding is available?

If there is no additional financial assistance from the Corps, the District will continue moving the project forward by using local Safe, Clean Water funding to provide 100-year flood protection for Reach 7 up to West Dunne Avenue in Morgan Hill. This reduced-scale project would support future construction of the full preferred project at a later date. The District will endeavor to keep the Corps as a federal partner, as this would allow the District to collect reimbursements from the state for rights-of-way expenditures.

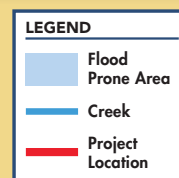
**Geographic area of benefit:** Morgan Hill, San Martin and Gilroy

**Estimated funding from Safe, Clean Water:** \$39 million

**Estimated total project cost:** \$105 million\*

*\*The \$66 million additional funds required to complete the project are comprised of: previous and anticipated District expenditures (Clean, Safe Creeks and other), funding from the City of Morgan Hill, and federal funding from the Corps (previous and anticipated). This project is eligible for state subvention reimbursements; some reimbursements have already been applied for and/or approved by the state. Reimbursements of \$9 million are accounted for as anticipated revenue in the first years of the new program. A minimum of \$20 million in state reimbursements are anticipated to be approved during the Safe, Clean Water program and have been accounted for as a reduction in the total cost of this project. Additional funds beyond what have already been identified may be required to complete this project.*

*The Upper Llagas project continues the construction of flood improvements along 12.5 miles of channel extending from Buena Vista Avenue to Wright Avenue, including West Little Llagas Creek in downtown Morgan Hill.*





## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project E7: San Francisco Bay Shoreline Study – Milpitas, Mountain View, Palo Alto, San Jose, Santa Clara and Sunnyvale

- Provide flood protection for 500 structures and 37 businesses, including important economic centers
- Protect vital infrastructure including roads, highways, parks, airports and sewage treatment plants
- Planning and design for restoration of 2,240 acres of salt ponds back to tidal marsh and related habitats
- Provide recreational opportunities and public access for wildlife viewing

## PROJECT E7 San Francisco Bay Shoreline Study – Milpitas, Mountain View, Palo Alto, San Jose, Santa Clara and Sunnyvale

This project is a partnership with the California State Coastal Conservancy, the U.S. Army Corps of Engineers (Corps) and regional stakeholders. The purpose of the San Francisco Bay Shoreline Study is to: provide tidal flood protection, restore and enhance tidal marsh and related habitats, and provide recreational and public access opportunities. Initial construction for flood protection is planned for “Economic Impact Area 11,” which is the urban area of North San Jose and the community of Alviso (EIA11).

The project will rely on federal participation from the Corps to review and approve the plans. Without federal participation, the District cannot implement additional planning, design and construction due to limited available funding. The proposed Safe, Clean Water funding will provide the District’s cost share to complete the planning study for the full project area, and will provide a portion of the District’s cost share toward construction of flood protection improvements in the North San Jose (EIA11) area, in and near Alviso.

### Flooding history and project background

This project stems from the 2003 acquisition of thousands of acres of former South Bay salt production ponds, purchased for restoration with combined public and private funding. The South Bay Shoreline Study is an important component of the South Bay Salt Ponds Restoration Project, a large, multi-agency effort to restore 16,500 acres of tidal wetlands which involves all South Bay cities that meet the San Francisco Bay.

Without incorporating flood protection measures, proposed recreational use and environmental restoration is likely to reduce the effectiveness of existing shoreline levees formerly maintained for salt production. Project E7 would upgrade levees to protect Silicon Valley’s “Golden Triangle,” bounded by Highways 101, 237 and



*Levee upgrades in project E7 will allow the South Bay Salt Ponds Restoration project to move forward without increasing flood risks to homes and businesses.*

880, and extending north into the baylands of Milpitas. Multiple flood events since the mid-1990s have damaged business operations in this area, now home to major high-tech corporations including Intel, Google, Yahoo, Cisco and others. The project would also protect Alviso neighborhoods, as well as important infrastructure such as airports and sewage treatment plants.

The existing multi-agency partnerships for the South Bay Salt Ponds Restoration project and the San Francisco Bay Shoreline Study ensure that all goals for this largest wetland restoration on the West Coast will be incorporated. The Safe, Clean Water measure would provide a share of the total funding needed for planning and design phases for the full shoreline project area. It would also provide the funding needed to purchase lands, easements and rights-of-way as necessary to construct improvements in EIA11, and a share of the construction costs for that portion of the project.

### Benefits

- Protects more than 500 structures and 37 businesses
- Provides planning and design to protect nearly 4,700 acres and more than 5,000 structures, including roads, highways, parks, airports and sewage treatment plants
- Allows for the restoration of 2,240 acres of tidal marsh and related habitats
- Provides recreational and public access opportunities

### Key performance indicators

1. Provide portion of the local share of funding for planning and design phases for the former salt production ponds and Santa Clara County shoreline area.
2. Provide portion of the local share of funding toward estimated cost of initial project phase (Economic Impact Area 11).

*This is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, if local funding alone is available, the project will be reduced in scope. Each year in its annual review of the Safe, Clean Water program, the District Board will assess the funding status and determine the appropriate strategy to follow.*

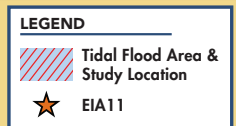
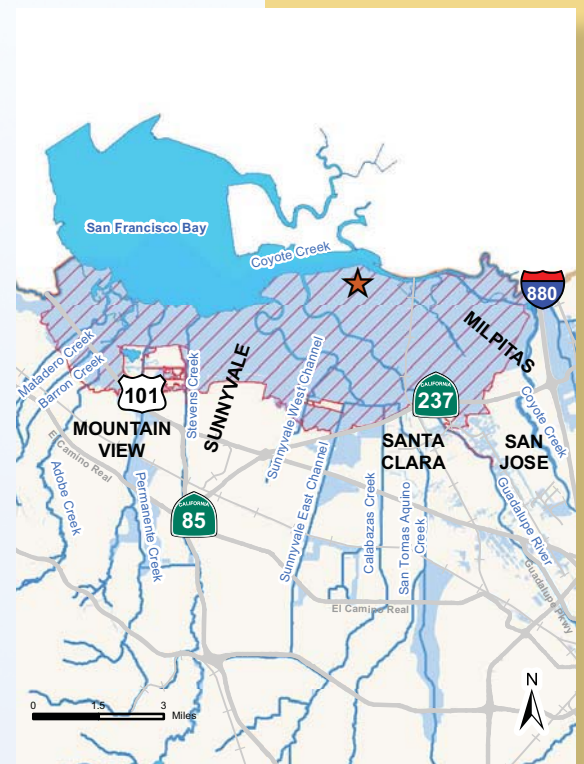
**Geographic area of benefit:** Milpitas, Mountain View, Palo Alto, San Jose, Santa Clara and Sunnyvale

**Estimated funding from Safe, Clean Water:** \$20 million

**Estimated total project cost:** \$223 million\*

*\*The \$203 million in additional funds required to complete the project are comprised of: previous District expenditures, state and local partner funding, and anticipated federal funding from the Corps. This project may be eligible for state subvention reimbursements. However, subvention funds are uncertain and have not been accounted for in the finances of the Safe, Clean Water program.*

*The San Francisco Bay shoreline study area includes the economically important high-tech industries in Silicon Valley's "Golden Triangle," as well as airports, sewage treatment plants and other vital infrastructure.*





## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Project E8: Upper Guadalupe River Flood Protection, Highway 280 to Blossom Hill Road – San Jose

- Protect approximately 6,280 homes, 320 businesses and 10 schools and institutions
- Provide 1 percent flood protection along 5.5 miles of channel in San Jose
- Design and construct flood protection for Reach 7 in Willow Glen
- Improve 12 miles of fish habitat inside and upstream of project reach
- Improve stream water quality
- Allow for creekside trail access

*Flooding along the Upper Guadalupe River inundates homes, businesses and important commuter highways and light rail lines.*



## PROJECT E8 Upper Guadalupe River Flood Protection, Highway 280 to Blossom Hill Road – San Jose

### Preferred project: A federal-state-local partnership

This project is federally authorized and continues a 2000 Clean, Safe Creeks project in partnership with the U.S. Army Corps of Engineers (Corps) to plan, design and construct improvements along 5.5 miles of channel extending from Interstate 280 to Blossom Hill Road. Improvements include channel widening, construction of floodwalls and levees, replacement of road crossings and planting of streamside vegetation. Reducing flood frequency and bank erosion will improve water quality, while planned mitigation measures will give fish access to an additional 12 miles of habitat within and upstream of the project reach.

### Flooding history and project background

Damaging flood events occurred in 1982, 1983, 1986, 1995 and 1998. Severe flooding in 1995 damaged more than 150 homes in the Gardner, Willow Glen, and South San Jose residential districts, and shut down Highway 87 and the parallel light rail line—both major commuter thoroughfares. Freeway and light rail flooding occurred again in 1998.

The Upper Guadalupe River Flood Protection project was authorized for construction by the Corps in 1999 and received local funding in 2000, followed by the start of construction in 2008. Fish passage, erosion protection and other components were constructed earlier.

To increase the level of flood protection while keeping the preferred project viable, the local-only plan funded by Clean, Safe Creeks was modified by the District Board in March 2012 to provide a basis to advance the full federal project as soon as funds become available. The plan is now to acquire all necessary rights-of-way and relocate bridges and utilities in preparation for the full, preferred project. The modified plan also includes design and construction for both Reach 6 (Interstate 280 to the Union Pacific Railroad crossing) and Reach 12 (Branham Lane to Blossom Hill Road).

### Benefits

- Preferred project will construct 1 percent flood conveyance capacity for 5.5 miles of channel in San Jose, protecting approximately 6,280 homes, 320 businesses and 10 schools/institutions
- Local funding only constructs improvements to 4,100 linear feet to convey 1 percent flow
- Improves stream habitat values and fisheries
- Improves stream water quality
- Allows for creekside trail access

### Key performance indicators

**1. Preferred project with federal and local funding:** Construct a flood protection project to provide 1 percent flood protection to 6,280 homes, 320 businesses and 10 schools and institutions.

**2. With local funding only:** Construct flood protection improvements along 4,100 feet of Guadalupe River between the Southern Pacific Railroad crossing downstream of Willow Street to the Union Pacific Railroad crossing downstream of Padres Drive. Flood damage will be reduced; however, protection from the 1 percent flood is not provided until completion of the entire Upper Guadalupe River project.

*This is a federal-state-local partnership, relying on federal funding and participation to achieve the full scope, with reimbursements anticipated from the state. However, if local funding alone is available, the project will be reduced in scope. Each year in its annual review of the Safe, Clean Water program, the District Board will assess the funding status and determine the appropriate strategy to follow.*

### What if no federal funding is available?

If federal assistance is not forthcoming, the District would use local Safe, Clean Water funds to construct part of the full, preferred project and to acquire the rights-of-way for the full project. The Safe, Clean Water program proposes an additional \$18.3 million in local funding to complete much-needed flood protection on Reach 7 in Willow Glen, from the Southern Pacific Railroad crossing downstream of Willow Street to the Union Pacific Railroad crossing downstream of Padres Drive. Construction of this reach and acquisition of rights-of-way must be completed before construction of the full project further upstream. When funding becomes available for the complete, federally authorized project, the remaining reaches will be constructed to achieve the full benefits described above.

**Geographic area of benefit:** San Jose

**Estimated funding from Safe, Clean Water:** \$18.3 million

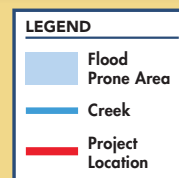
**Estimated total project cost:** \$320.6 million\*

*\*The \$302.3 million in additional funds required to complete the project are comprised of: previous District expenditures under the Clean, Safe Creeks plan, funding from the City of San Jose, and federal funding from the Corps (previous and anticipated). This project is eligible for state subvention reimbursements; some reimbursements have already been applied for and/or approved by the state. Reimbursements of \$28 million are accounted for as anticipated revenue in the first years of the new program.*

### What happens to Priority E projects if the Safe, Clean Water measure does not pass?

Some of the projects in this priority will not be funded at all if the proposed special tax does not pass. Maintenance of existing projects will be curtailed. Emergency planning and coordination for known flood risk areas will have much lower chance of funding. Few, if any flood risk studies will be initiated in the near future. Capital flood protection projects, all of which have already been initiated and authorized for federal funding, will slow significantly or be stopped altogether, pending alternate sources of funding. Up to 15,000 homes, schools and businesses that could be protected from flooding will remain at risk.

*The Upper Guadalupe project would provide improvements along 5.5 miles of channel extending from Interstate 280 to Blossom Hill Road.*





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# Financing the program

The Safe, Clean Water and Natural Flood Protection program (Safe, Clean Water) replaces the Clean, Safe Creeks and Natural Flood Protection plan (Clean, Safe Creeks), which has been funded by a special parcel tax approved by voters in 2000. If the proposed Safe, Clean Water program is approved by voters in November 2012, revenue will continue to be collected at the same rates as under the Clean, Safe Creeks plan. The Safe, Clean Water program replaces the Clean, Safe Creeks plan, and commitments made in the Clean, Safe Creeks measure will be completed as part of Safe, Clean Water during approximately the first five years of the program.

The program is expected to fund an estimated \$485 million in capital projects and \$190 million in operating projects, both continued and new. Safe, Clean Water projects and their anticipated costs are described in section four of this document, *Introducing the Safe, Clean Water Program*.

This financial section provides an overview of the Safe, Clean Water program including revenues, financing, expenditures, special tax rate structure, and details on the transition from the Clean, Safe Creeks plan to the Safe, Clean Water program. Unless stated otherwise, all currency in this section is provided in 2012 dollars.

## Financial highlights

### Continuation of the special parcel tax at same rate

The Safe, Clean Water program is a continuation of the Clean, Safe Creeks special parcel tax. As a continuation, parcel taxes will continue to be assessed at the same

*The Safe, Clean Water program includes numerous grants and partnerships that leverage funding to increase benefits. Shown here is the opening ceremony of the Stevens Creek Trail in Mountain View, which was built with help from District grants administered under the previous Clean, Safe Creeks plan.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Financial highlights

- Safe, Clean Water renews the expiring special parcel tax approved by voters in 2000.
- Renews existing parcel tax without increasing the tax rate
- Will fund approximately \$485 million in capital projects and \$190 million in operating projects, both continued and new
- Is expected to leverage over \$400 million in federal and state funds for local capital projects (Cont.)

rates as under the existing plan. **Table 5-1** below illustrates this by showing 2014 parcel tax rates by land use category for both measures. Note that taxes will only be assessed and collected on the measure in effect in 2014—either Clean, Safe Creeks or Safe, Clean Water, if it passes.

**Table 5-1 Parcel Tax Rates Comparison – No Change Under Proposed Program  
Clean, Safe Creeks vs. Safe, Clean Water**

Land Use Category*	Clean, Safe Creeks Parcel Tax July 1, 2013 – June 30, 2014			Safe, Clean Water Parcel Tax July 1, 2013 – June 30, 2014			Difference
	Minimum Charge for ¼ Acre or Less	Minimum Charge for 10 Acres or Less	Rate per Acre Over Minimum	Minimum Charge for ¼ Acre or Less	Minimum Charge for 10 Acres or Less	Rate per Acre Over Minimum	All Categories
Group A- Commercial and Industrial	\$111.68	-	\$446.720	\$111.68	-	\$446.720	No Change
Group B- Condominiums and Townhouses	\$26.80	-	\$335.040	\$26.80	-	\$335.040	No Change
Group B- Apartments, Mobile Homes, Churches	\$83.76	-	\$335.040	\$83.76	-	\$335.040-	No Change
Group C- Residential (Single Family to 4 Units)	\$55.84	-	\$2.792	\$55.84	-	\$2.792	No Change
Group D- Agricultural Acreage	-	\$27.92	\$2.792	-	\$27.92	\$2.792	No Change
Group E- Undisturbed/ Non-utilized Agriculture, Marsh, Ponds – Urban	\$8.38	-	\$0.838	\$8.38	-	\$0.838	No Change
Group E- Undisturbed, Grazing, Brush, Forest – Rural	-	\$8.38	\$0.105	-	\$8.38	\$0.105	No Change
Group F- Well site for residential uses	-	-	-	-	-	-	No Change

\*Land use categories are described in Resolution No. 12-62, provided in Appendix E.

*As a continuation of Clean, Safe Creeks, the Safe, Clean Water program will continue to assess parcel taxes at the same rate as under the existing plan.*

### Local tax cannot be taken by state

If approved, the Safe, Clean Water measure would be a special parcel tax approved for specific, local purposes only. This means that the State of California cannot redirect these funds to fulfill its own financial obligations as it has in the past.

### Built-in sunset clause

With voter approval in November 2012, the Clean, Safe Creeks plan will be replaced with the Safe, Clean Water program. The replacement will occur on July 1, 2013, when the Safe, Clean Water program will take effect. The first revenue from



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Financial highlights

(From previous page)

- Includes exemptions for low-income senior citizens
- Built-in 15-year sunset clause with tax ending on June 30, 2028
- Funding from special tax cannot be taken by the state (Cont.)

the Safe, Clean Water special tax will be received by the District in January 2014. Like the previous Clean, Safe Creeks plan, the new funding structure has a built-in sunset date—that is, the tax will automatically end after 15 years on June 30, 2028.

### Consumer price index (CPI) adjustment

To account for the effects of inflation, the District Board of Directors may adjust the special tax amounts annually using the San Francisco-Oakland-San Jose Consumer Price Index for all Urban Consumers (CPI-U). Special tax amounts may be adjusted annually by the percentage increase in the year or years since February 30, 2013. However, in the event that the annual CPI-U increase is less than 3 percent, the annual increase for special tax rates may be set at 3 percent.

### Recovery of flood or other natural disaster damage repair costs

Unanticipated disasters can cause significant damage to flood protection facilities and result in significant repair costs. For the purposes of the 15-year program, unanticipated disasters are those that are declared disasters by the Governor of California or the President of the United States due to flooding or other natural disasters. Since these events do not occur frequently, the 15-year program does not include funding to repair facility damage caused by disasters. As a result, in the event of an unanticipated disaster the special tax rates shall be increased to meet the repair cost of District facilities damaged by flooding or other natural disasters, and the maximum tax rate shall be the percentage increase in CPI plus the 4.5 percent necessary to cover the repair cost of District facilities. A special tax rate increase such as this can only be collected for three years after an unanticipated disaster has occurred.

### Exemption for low-income senior citizens

The District will continue to provide an exemption from the special tax for residential properties owned by one or more persons over 65 years of age who occupy that property as their principal residence. In order to qualify, the applicant must be low-income, own at least 50 percent of the property, and have attained age 65 before the end of the fiscal year in which the tax is due. The applicant must apply for the exemption each year. Low-income is defined as 75 percent of the state median total household income. The latest available data from March 2012 indicates that the state median total household income level was \$54,198; “low income” would then be \$40,649.

*Under the Safe, Clean Water measure, low-income seniors would continue to receive an exemption from the special tax.*





## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Financial highlights

(From previous page)

- **Four funding sources:** Safe, Clean Water parcel tax, Clean Safe Creeks reserves, state reimbursements, and interest earnings.
- **Safe, Clean Water measure covers \$548 million of total \$720 million cost**
- **Total funding of \$720 million equals the total funding uses**
- **Uses a combination of debt and pay-as-you-go financing**



## Funding sources

Four primary funding sources provide the resources to implement the projects under the Safe, Clean Water program. They are the special parcel tax, starting reserves from unspent funds of the Clean, Safe Creeks plan, state reimbursements, and interest earnings. Each source is discussed in greater detail below.

Over the 15-year period, total funding sources of \$720 million are anticipated. As illustrated in **Chart 5-1** below, total funding comprises \$548 million from special parcel tax collections, \$113 million from beginning Clean, Safe Creeks reserves, \$47 million from state reimbursements, and \$12 million from interest income.

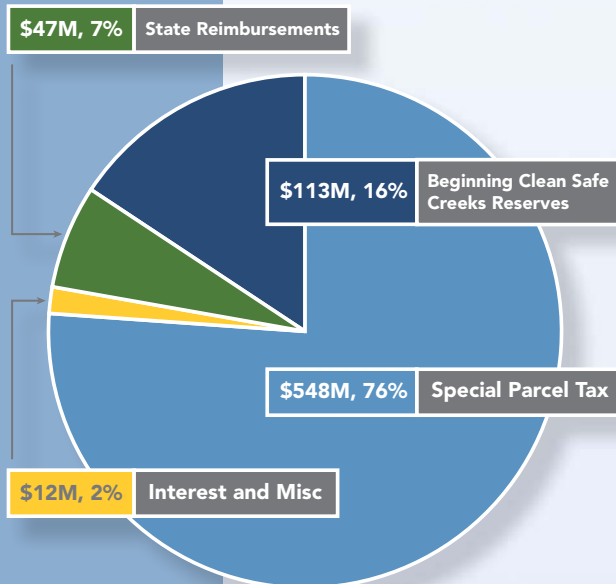
### Special parcel tax revenue

The primary source of revenue for the Safe, Clean Water program is a special parcel tax. This is a local tax that can be used for any purpose approved by the voters, including capital projects, maintenance, and services that benefit the county as a whole—in other words, the entire Safe, Clean Water and Natural Flood Protection program. Continuing the current special tax allows the District to use the existing assessment formula to calculate tax amounts, and to use the existing database of property owners of record for collection. This results in a considerable cost savings by minimizing the administrative burden of initiating a new type of tax program.

The rate structure for calculating the proposed special tax is identical to the Clean, Safe Creeks structure that it replaces, and will be applied equitably and consistently throughout the county.

**Chart 5-1 Safe, Clean Water Funding Sources**  
**\$720 Million 15-Year Estimated Total**

In 2012 Dollars



\*State reimbursements do not include \$20M in subventions that are carried as a reduction to the Upper Llagas Creek capital project cost.

Rates are based on land use and the size of each land parcel, which is directly related to stormwater runoff. The land use categories, their estimated stormwater runoff factors, and the special tax calculation formula are described in detail in Appendix D. **Table 5-2** below shows how the first year's parcel tax revenue would be assessed in 2014 by land use category. The table is presented in 2012 dollars and the data is based on the Santa Clara County tax roll.

**Table 5-2 Estimated Special Parcel Tax Revenue in 2014 by Land Use Category\***

Land Use	Acres	Parcel Count	Parcel Tax Assessment Revenue (2012 Dollars)
Group A- Commercial and Industrial	31,531	19,756	\$11,538,255
Group B- Condominiums, Townhomes, Institutions, Apartments, , Mobile Homes	13,118	87,371	\$4,992,368
Group C- Residential (Single Family to 4 Units)	93,144	346,273	\$18,316,456
Group D- Disturbed Urban, Vacant, Agriculture	62,533	10,031	\$347,323
Group E- Undisturbed Agriculture, Marsh, Ponds – Urban	193,480	1,992	\$70,920
Group E- Undisturbed, Grazing, Brush, Forest – Rural	191,048	1,777	\$41,601
Group F- Well Site (Residential)	9	164	\$0
Assessment Override**	7,769	107	\$355,651
Exempt	169,529	17,185	\$0
S.C. County Collection Fee	-	-	(\$356,626)
<b>TOTAL</b>	<b>762,161</b>	<b>484,656</b>	<b>\$35,305,948</b>

\*Land use categories are described in Resolution No. 12-62, provided in Appendix E.

\*\*Assessment override values are corrections for parcels where actual land use differs from zoned land use.

*Special parcel tax rates are based on land use and the size of each parcel, which is directly related to storm water runoff.*

### Beginning Clean, Safe Creeks reserves

The Clean, Safe Creeks plan used pay-as-you-go financing, which means that funds were accumulated until sufficient monies became available to begin construction work. This financing structure avoided finance charges, but incurred project cost inflation while construction was deferred. Because the Safe, Clean Water program replaces the Clean, Safe Creeks plan in July 2013—three years before Clean, Safe Creek's original sunset date—it also picks up those accumulated reserves.

At the start of the Safe, Clean Water program, approximately \$113 million is anticipated to be accumulated in reserves specifically to help satisfy Clean, Safe Creeks commitments. Most of this accumulated amount is from set-aside revenue designated for capital project construction, and some is from efficiencies that saved money which can now be used for other projects. These Clean, Safe Creeks reserve funds are intended to help construct and maintain the capital projects continued from the Clean, Safe Creeks plan, which are listed in the Appendix fold-out summary Chart G1, and described in section four, *Introducing the Safe, Clean Water Program*. A portion of the reserve funds will also be available to support new Safe, Clean Water projects during the initial years.

### State reimbursements and other contributions

The State Flood Control Subventions Program, administered by the California Department of Water Resources, provides financial reimbursements to local agencies that construct federally authorized flood protection projects. Several capital projects in the Clean, Safe Creeks plan that will be continued into the Safe, Clean Water program are eligible and have already begun to receive subvention monies. As such, state subventions related to Clean, Safe Creeks projects are the secondary revenue source in the Safe, Clean Water program, with anticipated subventions estimated at \$47 million. These constitute reimbursements for previous expenditures under the Clean, Safe Creeks plan for the Upper Guadalupe River (\$28 million), Upper Berryessa Creek (\$10 million), and Upper Llagas Creek (\$9 million) projects. An additional \$20 million subvention is carried as a reduction to expenditures for the Upper Llagas Creek project proposed for the Safe, Clean Water program.

Many Safe, Clean Water capital projects leverage local funding by partnering with the U.S. Army Corps of Engineers (Corps). The Corps provides in-kind work such as planning, design and construction, but does not provide direct monetary contributions in the same way as the state subventions program; therefore, federal participation is not counted as revenue. Section four, Priority E of this document describes the projects that are federally authorized.

*As a voter-approved tax to support local projects, funding from the Safe, Clean Water measure could not be taken by the state to balance its own budget. Shown here is the District's multi-use Downtown Guadalupe River project which incorporates flood protection, native vegetation and recreational access, as well as a channel passage that allows fish to migrate through during low flows.*

## Interest earnings

Interest earnings are accumulated on funds waiting to be used. The amount accumulated is primarily earned on money waiting to be spent in the pay-as-you-go capital program financing method described below.

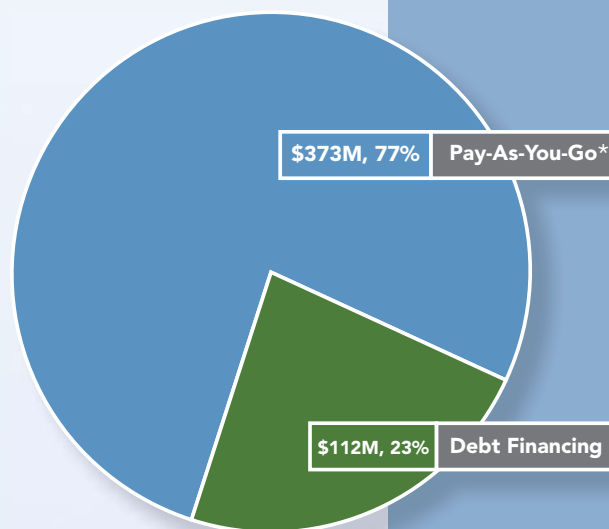
## Pay-as-you-go and debt financing for capital projects

The Safe, Clean Water program will use a combination of debt financing and pay-as-you-go funding to pay for capital projects. Debt financing is a way for the District to borrow money up-front against the stream of revenue projected over the life of the program. Approximately 23 percent of capital project costs are anticipated to be funded through debt financing via the issuance of Certificates of Participation (COPs). Debt proceeds of \$112 million are planned for 2015. Debt service totaling \$133 million is comprised of repaying the principal borrowed (\$112 million) and interest on the borrowed money (\$21 million), which is the cost of financing. This financing plan, combined with the revenue stream and carry-forward of the Clean, Safe Creeks reserves, will fully fund all Clean, Safe Creeks projects so that their commitments are met. COP financing will also help fund Safe, Clean Water capital projects at the start of the program, rather than waiting for reserves to build up.

Pay-as-you-go financing means that funds must be accumulated until enough has been collected to commit to a construction project. As shown in **Chart 5-2**, approximately \$373 million (77 percent) of capital costs in the Safe, Clean Water program will be funded through pay-as-you-go financing. Consequently, some of the capital construction will not begin until later in the program. However, planning and design work will move forward on these projects so that when sufficient funds are available construction can begin.

**Chart 5-2 Capital Program Funding Sources:  
Estimated Pay-As-You-Go and Debt Financing**

In 2012 Dollars



\*Includes carry-over reserves from the Clean, Safe Creeks plan.

## Funding uses

The purpose of the Safe, Clean Water program is to deliver capital projects and vital services to the residents of Santa Clara County. The total cost of the new program's commitments is \$720 million. These can be grouped into: completion of Clean, Safe Creeks obligations (\$214 million), implementation of Safe, Clean Water priorities (\$426 million), planning and delivery (\$21 million), cost of debt financing (\$21 million), and undesignated contingency funds intended to offset unanticipated expenditures (\$38 million).

Since the Safe, Clean Water program would replace the Clean, Safe Creeks plan before its sunset date, the program would fund completion of Clean, Safe Creeks commitments along with Safe, Clean Water projects. Remaining Clean, Safe Creeks commitments total \$214 million. Clean, Safe Creeks capital projects funded by Safe, Clean Water beyond the first three years are limited to two projects that require additional funds to complete due to federal funding shortfalls: the Upper Llagas Creek Flood Protection and Upper Guadalupe River Flood Protection projects. These and all Safe, Clean Water projects help fulfill the five priorities in the new program and are described at length in section four. The Safe, Clean Water five priorities and their anticipated expenditures are summarized below in **Table 5-3**.

**Table 5-3 Safe, Clean Water Estimated Costs By Priority**

Priority	15-Year Estimated Cost in Millions (2012 Dollars)	Percent of Total
A – Ensure a safe reliable water supply	\$15	4%
B – Reduce toxins, hazards and contaminants in our waterways	\$54	13%
C – Protect our water supply from earthquakes and natural disasters	\$48	11%
D – Restore wildlife habitat and provide open space	\$108	25%
E – Provide flood protection to homes, businesses, schools, and highways*	\$201	47%
<b>TOTAL</b>	<b>\$426</b>	<b>100%</b>

\*Priority E does not include \$20 million of anticipated state subventions because this expected reimbursement has been deducted from the estimated Upper Llagas Creek project cost

## Planning and delivery, debt financing interest expense, and undesignated contingency funds

Planning and delivery costs and debt financing interest expense are part of the costs to deliver the Safe, Clean Water program. Planning and delivery costs include capital project planning and delivery, special parcel tax revenue collection, and funding for at least two program audits. Debt financing interest expense is the net cost of financing projects by borrowing money, as described earlier. Interest rates are currently very favorable, which means that the District would be able to complete all Clean, Safe Creeks capital projects and some Safe, Clean Water capital projects in the first few years of the program, instead of waiting for construction funds to accumulate.

Undesignated contingency funds are monies set aside for unanticipated expenses. One lesson learned from the Clean, Safe Creeks plan was that contingency funding is needed to cover the possibility of unanticipated project changes and increased costs due to market fluctuations, etc. Undesignated contingency funds are approximately nine percent of Safe, Clean Water project costs, and are essential to provide flexibility in project management.

### Summary of funding sources and uses

As shown in **Table 5-4**, the Safe, Clean Water program is balanced over the 15-year duration of the program. The total funding sources of \$720 million are equal to the total funding uses. These funds would deliver the services and projects that the Santa Clara Valley Water District would commit to voters with passage of the November 2012 ballot measure to fund the Safe, Clean Water program.

**Table 5-4 Total Estimated Safe, Clean Water Funding Sources and Uses**

	15-Year Estimated Total in Millions (2012 Dollars)	Percent of Total
Funding sources		
Special parcel tax revenue	\$548	76%
Beginning Clean, Safe Creeks reserves	\$113	16%
State reimbursements*	\$47	6%
Interest and miscellaneous	\$12	2%
<b>Total funding sources</b>	<b>\$720</b>	<b>100%</b>
Funding uses		
Safe, Clean Water program priorities		
A – Ensure a safe reliable water supply	\$15	
B – Reduce toxins, hazards and contaminants in our waterways	\$54	
C – Protect our water supply from earthquakes and natural disasters	\$48	
D – Restore wildlife habitat and provide open space	\$108	
E – Provide flood protection to homes, businesses, schools, and highways*	<u>\$201</u>	
Subtotal program priorities A thru E	\$426	59%
Planning and delivery	\$21	3%
Debt financing**	\$21	3%
Undesignated contingency	\$38	5%
Completing Clean, Safe Creeks 2000 Plan	\$214	30%
<b>Total funding uses</b>	<b>\$720</b>	<b>100%</b>

\*State reimbursements do not include \$20 million in anticipated subventions that are carried as a reduction to the Priority E Upper Llagas Creek project cost.

\*\*Cost of financing is the net of debt service of \$133 million less debt proceeds of \$112 million.



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# Implementing the program

Upon approval of funding for the Safe, Clean Water and Natural Flood Protection program (Safe, Clean Water), the District would begin drafting the first of three implementation plans that would each apply to five years of the 15-year measure. The three separate plans were recommended by independent auditors of the current Clean, Safe Creeks and Natural Flood Protection plan (Clean, Safe Creeks), so that adjustments can be made to reflect the ongoing economic, policy and regulatory changes that occur during a long-term program. It is anticipated that the final draft of the first five-year implementation plan would be available to the public for comment by July 1, 2013, before the District Board of Directors approves and finalizes it.

The implementation plan would be carried out by District staff under the direction of the District's elected Board of Directors (Board). As with the 2000 Clean, Safe Creeks plan, the Board would appoint an Independent Monitoring Committee (IMC) to track the progress of the Safe, Clean Water program and ensure transparency and accountability. The roles of the Board and the IMC are briefly summarized at the end of this section and would be described more specifically in the first five-year implementation plan.

## Implementation plans: a continual process of refinement

The strategy of having three consecutive five-year implementation plans would allow for continual refinement of all projects included in the Safe, Clean Water program. As each five-year plan proceeds, the IMC, Board and staff would share information to keep projects on-track, with adjustments made as needed to ensure that key performance indicators are achieved on time and within budget.

### Three consecutive implementation plans

The first of the three Safe, Clean Water implementation plans would define the roles and responsibilities of the Board with respect to oversight, the IMC with respect to monitoring, and District staff with respect to implementation. The plan would include procedures and guidelines, specific definitions, annual measures and descriptions of processes to guide program implementation. For example, the plan would describe how to establish evaluation criteria for the grants and partnerships offered in the program, using a science-based decision-making process with stakeholder input.

Key performance indicators (KPIs) would be used to monitor progress and completion for all projects in the new program. The first five-year plan would describe how KPIs would be measured, and designate categories of completion for each project such as: schedule-based (completed according to a timeline), performance-based, (for example: construct three geomorphically designed projects), and/or fiscal-based (full allocation is expended to accomplish desired outcomes). KPIs for all projects in the new program are listed in Appendix fold-out Chart G-1 of this report, as well as in section four, *Introducing the Safe, Clean Water Program*.


## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Implementation highlights

- Three detailed five-year implementation plans allow for continual program refinement
- Independent Monitoring Committee of volunteers appointed by District Board to ensure transparency and accountability
- Key performance indicators to monitor progress and determine completion of all projects



*Three separate five-year implementation plans would allow for continual refinement of all Safe, Clean Water projects to keep them on-track and current with continually changing regulatory and economic conditions. Shown here is the ribbon cutting for the Calabazas Creek Flood Protection project, which was completed under the voter-approved Clean, Safe Creeks plan.*



## SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

### Transitioning to the Safe, Clean Water program

- Funding collected during Clean, Safe Creeks for capital projects will continue to meet those same commitments under the Safe, Clean Water measure
- Allocations from the first three years of Safe, Clean Water revenue will also help complete Clean, Safe Creeks capital projects, which otherwise would have received funding up until the January 2016 Clean, Safe Creeks sunset date.
- All other Clean, Safe Creeks projects will be continued under the new program with similar or expanded obligations

The District would update each subsequent five-year plan to incorporate state and federal policy/regulatory changes, and economic fluctuations that influence the District's ability to implement projects, as well as new or evolving terms or technologies that need clarification. Subsequent implementation plans would also take into account periodic audits of the Safe, Clean Water program to provide a platform for continuous improvement. As the funding sunset of the Safe, Clean Water program approaches, the final five-year implementation plan would introduce closure options, which would be adjusted annually as necessary during the final years of the program.

### Annual budgets, project milestones and annual reports

Appendix fold-out Chart G-2 shows the anticipated schedule for each of the projects in the Safe, Clean Water program. Projects would be included in the District's annual budget which the Board approves each year during a publicly noticed, open meeting where stakeholders can make comments and recommendations. The budget provides detailed information on all District projects including project descriptions, goals, milestones and anticipated completion dates so that all elements can be coordinated to ensure steady progress.

District staff would prepare an annual report on all projects in the Safe, Clean Water program to include: project status based on established performance measures, trends and progress toward completion of projects, and expenditures of funds. The yearly report would also discuss the status of anticipated federal and state funding, as well as any other challenges or opportunities that may affect the program. Staff would provide the report to the Board and IMC for review and strategic direction. The budget provides detailed information on all District projects including project descriptions, goals, milestones, and anticipated completion dates so that all elements can be coordinated to ensure steady progress.

### Transitioning from the Clean, Safe Creeks plan to the Safe, Clean Water program

On the date that the voter-approved parcel tax goes into effect, the Safe, Clean Water program would replace the Clean, Safe Creeks measure in its entirety. Any tax payments collected for use by the District under Clean, Safe Creeks would be used to achieve similar or expanded projects under the Safe, Clean Water program. Funding collected for capital projects under the Clean, Safe Creeks measure would be used under the Safe, Clean Water program to meet previous commitments. All other projects identified in Clean, Safe Creeks would be replaced by comparable projects with similar or expanded obligations.

Funds needed to complete Clean, Safe Creeks projects would include carry-forward reserves from the Clean, Safe Creeks plan, allocations from the first three years of revenue under the Safe, Clean Water measure, and a portion of Safe, Clean Water debt proceeds. These allocations would help complete Clean, Safe Creeks capital projects which otherwise would have received funding up until the January 2016 Clean, Safe Creeks sunset date. The first of the three Safe, Clean Water five-year implementation plans would document all pending Clean, Safe Creeks obligations and how they would be met or carried into the Safe, Clean

Water program. As shown in **Table 6-1** below, projects transition from the Clean, Safe Creeks plan to the Safe, Clean Water program in one of four ways:

1. **Carried-forward** projects meet the original key performance indicators described under the Clean, Safe Creeks plan, but have been updated with additional work using new revenue from the Safe, Clean Water program.

**Table 6-1 Transitioning Clean, Safe Creeks Projects to the Safe, Clean Water Program**

Clean, Safe Creeks Activity Number* and Project Name	Corresponding Safe, Clean Water Project	Notes
Details of Safe, Clean Water projects are provided in section four of this report. Also see Appendix G for a full summary of all Safe, Clean Water projects		
<b>Carried forward</b> - will meet original Clean, Safe Creeks KPIs, but additional Safe, Clean Water funding enables additional work		
1.1 San Francisquito Creek	E5	Clean, Safe Creeks included planning and design; Safe, Clean Water will fund construction
1.1 Upper Guadalupe River	E8	see Appendix G for KPI
1.1 Upper Llagas Creek	E6	see Appendix G for KPI
<b>Completed</b> - Clean, Safe Creeks KPI has been met		
1.1 Calabazas Creek	-	KPI: Flood damage reduction for 2,483 parcels
<b>On track to be completed</b> - Clean, Safe Creeks KPIs will be met within first five years of Safe, Clean Water program		
1.1 Permanente Creek	-	KPI: Flood damage reduction for 1,664 parcels
1.1 Sunnyvale East and West Channels	-	KPI: Flood damage reduction for 1,618 parcels (Sunnyvale East) and 11 parcels (Sunnyvale West)
1.1 Berryessa Creek	-	KPI: Flood damage reduction for 100 to 1,814 parcels (depending on federal funding)
1.1 Coyote Creek	-	KPI: Planning study, design and partial construction of an engineering plan to provide flood damage reduction
4.1 Provide additional trails and open space along creeks and in watersheds	D3	KPI: Community partnerships to identify and provide public access to 70 miles of open space or trails along creeks.
<b>Closed and replaced</b> - Safe, Clean Water program funds a project with similar or expanded KPIs		
1.2 Sediment removal for capacity	E1	New KPI – see Appendix G
1.3 Maintenance of newly-improved creeks	E1	New KPI – see Appendix G
2.1 Reduce urban runoff pollutants in south county cities	B2	New KPI – see Appendix G
2.2 Hazardous materials management and incident response	B5	Similar KPI – see Appendix G
2.3 Impaired water bodies improvement	B1	New KPI – see Appendix G
2.4 Neighborhood creeks frequently inspected and cleaned of litter and graffiti	B6	Similar KPI – see Appendix G
2.4 Illegal encampment cleanup	B4	New KPI – see Appendix G
2.5 Assist county or cities in reduction of pollutants in surface water	B2, B3	New KPI – see Appendix G
3.1 Vegetation management	D1, E1	New KPIs – see Appendix G
3.2 Community partnerships to identify and implement restoration of fisheries, riparian habitat or wetlands	D2, D3, D4, D6, D8	Clean, Safe Creeks KPI achieved. Similar or expanded KPIs under new projects – see Appendix G

\*As designated in the Clean, Safe Creeks Independent Monitoring Report, available online at [valleywater.org](http://valleywater.org)



There are two such projects—E6: Upper Llagas Creek Flood Protection, and E8: Upper Guadalupe River Flood Protection, which are described in section four, *Introducing the Safe, Clean Water Program*.

2. **Completed** means those projects completed prior to June 30, 2013.
3. **On track to be completed** means that project key performance indicators as described in the Clean, Safe Creeks plan would be met within the first five years of the new Safe, Clean Water program.
4. **Closed and replaced** are those projects that would be replaced in the Safe, Clean Water program with projects that have similar or expanded key performance indicators.

## Federal and state partnerships

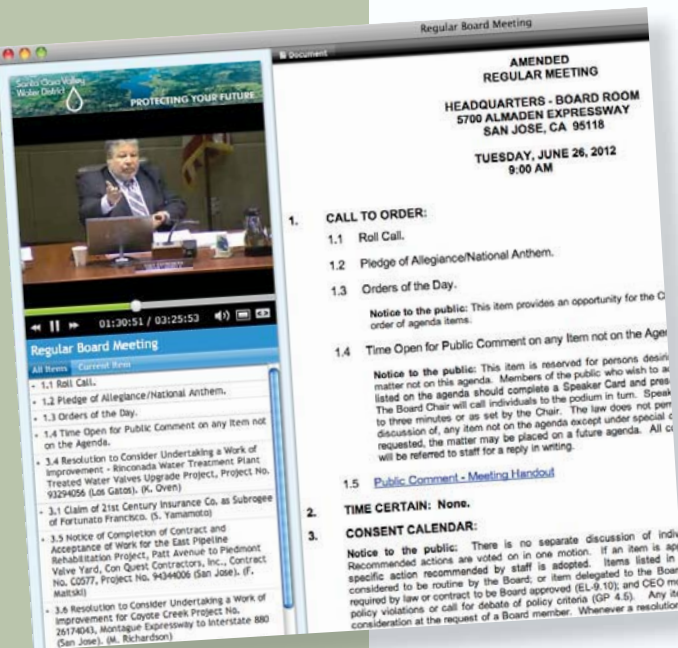
The Safe, Clean Water program leverages state and federal dollars to complete work that local funding alone cannot support. Capital projects for flood protection and infrastructure upgrades are expected to leverage over \$400 million in state and federal funds to supplement local funding from the renewed tax. State and federal participation are critical for the full implementation of the following capital projects:

- E4: Upper Penitencia Creek Flood Protection, Coyote Creek to Dorel Drive – San Jose
- E5: San Francisquito Creek Flood Protection, San Francisco Bay to Middlefield Road – Palo Alto
- E6: Upper Llagas Creek Flood Protection, Buena Vista Avenue to Wright Avenue – Morgan Hill
- E7: San Francisco Bay Shoreline Study – Milpitas, Mountain View, Palo Alto, San Jose, Santa Clara and Sunnyvale
- E8: Upper Guadalupe River Flood Protection, Highway 280 to Blossom Hill Road – San Jose

With the exception of project E7, for which the District is a minor partner in a larger state/federal project, the program defines two 15-year KPIs for each of these projects: one for the preferred federally funded project, and another for the local-only option. Descriptions of both options are provided in section four of this report.

Each year, the District Board would review the status of anticipated federal and state funding and decide if the local-only option has become a more viable choice. Any changes made to the Safe, Clean Water program by the Board would take place in publicly noticed, open hearings. As state and federal partnerships continue to evolve, each five-year implementation plan would include updated strategic direction for these partnered projects that depend on outside funding.

*All Board discussions and decisions on the Safe, Clean Water program will be carried out in publicly noticed meetings. As shown here, all Board meetings can be streamed live at [valleywater.org](http://valleywater.org), where you can also view previous, archived meetings.*





## Role of the District Board of Directors

The District Board would perform a detailed review of the performance, financial analyses and strategies of the Safe, Clean Water program every year using annual budget documents and annual reports prepared by District staff. The Board would also initiate at least two professional, independent audits during the 15-year program to ensure accountability.

The Board would approve implementation strategies at the outset of the program, and authorize any changes during the course of the program, including the shifting of funds if required to meet predetermined performance measures. The Board also would approve the specific selection criteria for each grant and partnership project, and set minimum cost-share requirements for grantees and partners.

The Board may also direct that proposed projects be modified or not implemented dependent on funding limitations, results of environmental reviews, and other factors. Should this occur, the Board would hold a formal, public hearing on the matter, which would be noticed by publication and by contacting interested parties. All Board discussions and decisions on the program would be carried out in publicly noticed meetings, which all are encouraged to attend.

## Role of the Independent Monitoring Committee

To ensure transparency and accountability, the District Board would appoint an Independent Monitoring Committee (IMC) of volunteers external to the District who would provide an independent voice in tracking progress during the duration of the Safe, Clean Water program.

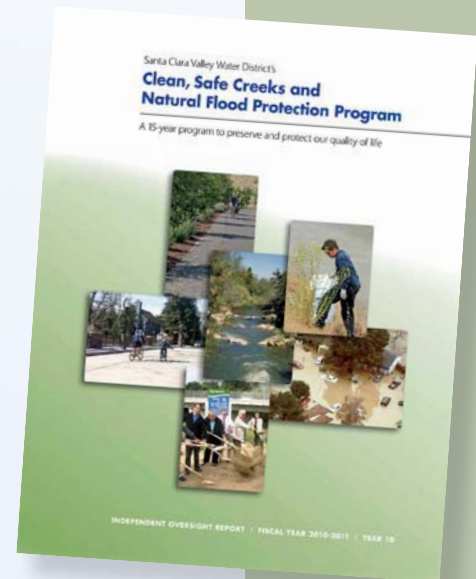
The IMC would analyze annual reports prepared by District staff and conduct annual audits of the Safe, Clean Water program. The IMC would also produce its own annual report to track program implementation and results, and the Board may direct staff to make necessary adjustments based on IMC findings. At the fifth and tenth anniversaries of the program, the IMC may recommend modifications that might be necessary to meet performance goals. The District would budget for the IMC's administrative support and annual reports, and all IMC findings will be available for viewing by the public.



### SAFE, CLEAN WATER AND NATURAL FLOOD PROTECTION

#### Transparency and accountability

- Annual report on progress and expenditures produced by District staff
- Annual reports produced by Independent Monitoring Committee
- Two professional audits performed during 15-year program
- All reports available for public viewing, and all decisions and discussions on program carried out in publicly noticed meetings



*To ensure transparency and accountability, the Safe, Clean Water Independent Monitoring Committee would produce its own annual reports. Shown here is a recent IMC report for the Clean, Safe Creeks plan, available online for public review at [valleywater.org](http://valleywater.org).*



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## Appendix A

# Frequently asked questions

### 1. What does the Safe, Clean Water program do?

The Santa Clara Valley Water District has developed a 15-year program to ensure that the most important water supply, flood protection and watershed stewardship needs of our area may be fulfilled. Based on input from more than 16,000 residents and stakeholders, the long-term priorities addressed in the plan are:

- Ensure a safe, reliable water supply for the future
- Reduce toxins, hazards and contaminants, such as mercury and pharmaceuticals, in our waterways
- Protect our water supply and local dams from the impacts of earthquakes and natural disasters
- Restore fish, bird and wildlife habitat; and provide open space access
- Provide flood protection to homes, businesses, schools, streets and highways

If passed by voters, the proposed Safe, Clean Water program would continue an existing tax measure to achieve these priorities.

### 2. Is local funding necessary to meet these goals? What if we don't renew this local water funding?

State and federal funding is diminishing and unreliable. Other District revenues are simply inadequate to ensure a safe, reliable water supply for the future, while also providing the other urgently needed projects and programs to meet the longterm water resource needs of our region.

Since 2000, voter-approved local funding has been critical to help meet our area's need for clean, safe creeks and waterways. This local funding, which can't be taken away by the state or federal government, is set to expire in 2016 if voters don't renew it.

If we do nothing, there will be major reductions and potential eliminations of existing programs and services. The most significant impacts will be in the area of impaired water bodies, water quality, flood protection and stream stewardship projects. For example, our ongoing effort to reduce hazardous toxins and pollutants in our waterways, or our HAZMAT emergency response capabilities, will be significantly curtailed. Similarly, 66,000 parcels will continue to remain in the flood zone.

In response to community priorities, the proposed Safe, Clean Water program would continue vital services from Clean, Safe Creeks, and add water supply and conservation projects. This will ensure a stable and reliable funding source for a portion of the water supply projects and programs. Water ratepayers would still contribute the majority of funding for water supply projects and needed capital improvements.



### 3. How can we be sure funds will be spent as promised?

This local funding, which can't be taken by the state or federal government, would only be spent in Santa Clara County to meet the specific purposes contained in the measure. It would:

- Require all expenditures to be published annually
- Include exemptions for low-income senior citizens
- Require external oversight by an independent monitoring committee
- Require at least two professional audits of the program during the 15-year period

Spending would be limited to specific projects included in the published program as part of the official ballot measure. If voters approve the proposed Safe, Clean Water program, the District Board of Directors would adopt an implementation resolution for the program. The implementing resolution would allow the Board, during public meetings, to appoint an Independent Monitoring Committee (IMC) composed of external community members and technical experts. The IMC would ensure that the funds are only spent as promised to voters.

### 4. How did you determine what projects or what portion of the total cost would be funded from this measure?

Extensive community engagement, including face-to-face, telephone and online interviews with 14,000 residents, told us clearly that the top priorities of the community are: providing a safe, reliable water supply for the future, reducing toxins and hazards from our waterways, making dams and pipelines safe from earthquakes and other disasters, restoring and protecting wildlife habitat, and ensuring flood protection.

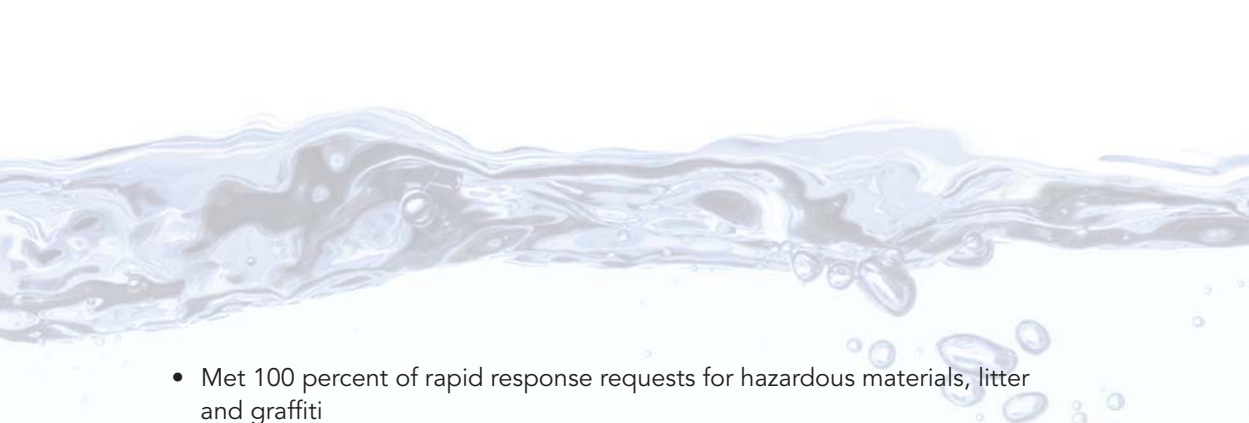
With the priorities established, the District staff evaluated the needs identified in the District's capital improvement program and longterm master plan, as well as extensive stakeholder and community input. Staff ranked all potential projects using set criteria, including benefit/cost ratios, geographical distribution, availability of outside funding sources and the potential for other agencies to help meet some or all of the public goals.

### 5. How successful was the previous Clean, Safe Creeks plan?

In November 2000, the Santa Clara County voters passed a parcel tax to support Clean, Safe Creeks and Natural Flood Protection, a 15-year plan to preserve and protect the quality of life in Santa Clara Valley.


Accomplishments through June 30, 2012 include:

- Removed 4,200 pounds of mercury from local creeks, streams and the bay
- Prevented other pollutants, toxins and hazardous materials from affecting our local waterways

- 
- Met 100 percent of rapid response requests for hazardous materials, litter and graffiti
  - Maintained public/private partnerships with Santa Clara County's Green Business Program to help support green jobs and the Santa Clara Valley Urban Runoff Pollution Prevention Program
  - Installed treatment systems to reduce methylmercury in Almaden Lake and the Calero, Almaden and Guadalupe reservoirs
  - Removed 5,677 dump trucks worth of sediment from streams to maintain the water carrying capacity of flood channels and ensure healthy streamflow and habitat (This represents 10 percent of the total sediment removed to date under Clean Safe Creeks, which is the percentage supported by the plan)
  - Completed the Calabazas Creek flood protection project ahead of schedule, protecting 2,483 parcels
  - Added access to more than 66 miles of pedestrian-friendly (and wherever possible, bicycle-safe) public trails and open spaces, and are poised to attain the plan goal of 70 miles by 2016
  - Restored more than 569 acres of tidal and creek side habitat—more than five times the original 100-acre goal
  - Conducted annual major cleanup events at 685 locations to improve cleanliness and safety in and around local creeks and streams
  - Managed 15,240 acres of vegetation, exceeding the target-to-date of 13,199 acres; the amount of vegetation as currently managed will exceed the 15-year, 22,000 acre Clean, Safe Creeks goal

Nearly all of the many high-priority projects named in the 2000 measure have been entirely or nearly completed. Several of the goals have already been exceeded, and more are on-track to be exceeded. In some cases, project timelines were extended because tough new clean water and environmental protection regulations required old plans to be updated. In other cases, we've extended project timelines to allow neighbors and community stakeholders to participate extensively in planning and design.

Finally, there are three flood protection projects that are heavily dependent on diminishing state or federal funding, which has delayed these vital projects and forced dramatic cutbacks. Funds that remain in the Clean, Safe Creeks program will be used to complete projects and programs that were promised in the measure voters approved in 2000. For details on the transition from Clean, Safe Creeks to the Safe, Clean Water program, please see section six, *Implementing the Program*. For more information on Clean, Safe Creeks performance, please see Appendix C.



## 6. What are the similarities and differences between the Safe, Clean Water program proposed for funding renewal, and the Clean, Safe Creeks plan that voters approved in 2000?

The biggest difference is that the current proposal includes projects to:

- Ensure a reliable, local water supply for the future
- Protect our water supply and dams from the impacts of earthquakes and natural disasters

Other elements of the plan are the same and these are:

- Ensure safe and clean creeks, streams and waterways by removing toxins, pollutants and hazardous materials
- Restore and protect wildlife habitat
- Ensure flood protection where needed

The current proposal also improves local control by reducing dependence on state and federal funding sources, and by allowing the District to issue bonds to ensure that urgently needed projects can be completed on time, without waiting for unreliable outside funding.

## 7. Would the funding renewal measure increase my tax rate?

No. Renewal of the voter-approved local funding would be a continuation of the current rate structure so tax rates would not increase. The local funding renewal measure would:

- Exempt low-income senior citizens
- Require all expenditures to be published annually
- Require external oversight by an independent monitoring committee
- Require at least two professional audits of the program during the 15-year period.

For more information on Safe, Clean Water finances, please see section five, *Financing the Program*.



# Appendix B

## Endorsements

### Supporters of the Safe, Clean Water program

#### Organizations and local government

Acterra

Campbell Chamber of Commerce

City of Morgan Hill

City of Palo Alto

City of Saratoga

Cupertino Chamber of Commerce

Designing By The Yard

American Federation of State, County and Municipal Employees, Local 101

International Federation of Professional & Technical Engineers, Local 21

Gilroy Chamber of Commerce

Milpitas Chamber of Commerce

Morgan Hill Chamber of Commerce

Mountain View Chamber of Commerce

National Association for the Advancement of Colored People,  
San Jose/Silicon Valley

Palo Alto Chamber of Commerce

International Federation of Technical and Professional Engineers, Local 21

Rose Garden Neighborhood Preservation Association

San Jose Silicon Valley Chamber of Commerce

Santa Clara Chamber of Commerce

Santa Clara County Coalition of Chambers of Commerce

Santa Clara Unified School District

Senterville Terrace Home Owners Association

Sunnyvale Chamber of Commerce

Sustainable Silicon Valley



## Individuals

Rita Aguilar-Cayo	Jared Goor	Drew Oman
James Atchison	Ulla Gran Knutsson	Windy Orviss
Jan Averde	Bert Greenberg	Cathy Paramo
Jill Ballard	Werne Haag	Susan Pines
Gail Bautista	Charles Hammerstad	Brad Piontkowski
Herman Bilenko	E. Carl Hanks Jr.	Mark Robbins
Alan Breakstone	Eric Herrmann	Renee Rockwell
Cathleen Brennan	Linda Hirao	Kenneth Schirle
Lois Brown	David Huang	Maris Schwartz
John Buffin	Barbara Hunt	Jennifer Sclafani
Judith Butts	Arun Inapakolla	Ravi Sharma
Thomas Carlino	Bob Ingold	Derek Sheeman
Farrell Caso	Ankur Jain	Mort Shein
Diane Cast	Mohan Jayapal	Kenneth Shirey
Jacqueline Cathcart	Magesh Jayapandian	Armando Silva
Joanne Chayut	Hanson Jiang	Cathrine Steinborn
Hao-Fu Chen	Marilee Johnson	Robert Stone
Hon. Dean J. Chu, former mayor, City of Sunnyvale	Bob Kanefsky	James Stott
Richard Ciapponi	Erika Kavanagh	Richard Tarver
George Clifford	Kenneth Kelly	Hon. Steve Tate, mayor, City of Morgan Hill
Jessica Collins	Manoj Keshavan	Bracey Tiede
Katherine Correia	Wayne Krill	Phung Tran
Carroll Cox	Susan Lamb	Daizo Uchida
David Craig	Jeff Laveroni	Rachel Unger
Vivian E. David	Juan Ledesma	Armando Valadez
Eugene Davis	Sampson Lee	David Valadez
Adrian Dewhurst	Bob Ligocki	Steven Verba
Brian Durbin	Nora Lira	Elise Wessels
Stefan Eberle	Terry Long	Anne Wilke
Paul Ellsworth	Marie and Ken MacDonald	Clark Williams
Clifford Flores	Douglas Manke	Carol B. Willis
Marian Fricano	Roz Marcelino	Sherdenia Wilson
Marianne Gardner	Jim McCann	Kenneth Wong
Nick Garza	Rosa McCann	Joel Zizmor
	Suzanne Morrone	



## Appendix C

# Clean, Safe Creeks 2000 performance

In 2000 voters passed Measure B, the Clean, Safe Creeks and Natural Flood Protection plan (Clean, Safe Creeks) to fulfill the community's need for projects that provided flood protection, restored habitat, supported healthy creek and bay ecosystems, improved water quality, and provided open space and recreational opportunities.

As detailed in the most recent Independent Monitoring Committee (IMC) report, nearly all the projects in the 2000 Clean, Safe Creeks plan have reached expected timeline goals and are completed or near completion. The District has also exceeded several goals and we are on track to exceed more. The only exceptions are two capital projects that did not receive anticipated federal funding, as discussed below. What follows are summaries of all Clean Safe Creek projects by outcome. The latest IMC report can be downloaded at [valleywater.org/Programs/IMCarchives.aspx](http://valleywater.org/Programs/IMCarchives.aspx).

### Outcome One: Homes, schools, businesses and transportation networks are protected from flooding

Six of the nine flood protection projects in the plan are locally funded. The remaining three capital projects rely upon federal and state funding, which has been delayed in all three cases. The Upper Berryessa project is currently on-target to deliver the authorized federal project, but future federal funding remains uncertain. The Upper Guadalupe and Upper Llagas projects have not received adequate federal funding to date, so they have been re-scoped to deliver the "local-funding-only" alternative that was described in the Clean, Safe Creeks plan. Moving forward, all three of these projects will continue to be managed so that the full scope of the federally authorized project could be accomplished should that funding become available. The following is a recap of each project and, where needed, its proposed transition into the Safe, Clean Water and Natural Flood Protection program (Safe, Clean Water).

### Locally funded flood protection projects

#### 1. Permanente Creek, San Francisco Bay to El Camino Real

This project is on-target to exceed its goal of providing 1 percent flood protection to 1,664 parcels along Permanente Creek. The addition of upstream high-flow detention basins landscaped with native plants will protect 1,336 additional parcels, bringing the total number to 3,000. Construction is estimated at \$30 million and will begin in Fiscal Year 2013, with completion by December 2016. No additional funding is needed for this project.

#### 2. San Francisquito Creek, planning and design, San Francisco Bay to Searsville Dam

Clean, Safe Creeks funding covered the feasibility study and engineering design phase of this project and the District is on schedule to meet this commitment by December 2016. Subsequent to the Clean, Safe Creeks adoption in 2000, the U.S. Army Corp of Engineers (Corps) agreed to become a federal partner for construction, with the San Francisquito Creek Joint Powers Authority (JPA) acting as the local



sponsor. Once constructed, the project will protect 4,000 homes and businesses in two counties (more than 3,000 in Santa Clara County). The proposed Safe, Clean Water program will provide local funding to complete the project in partnership with the JPA and the Corps. Details on construction and funding can be found in sections four and five of this document, *Introducing the Safe, Clean Water Program*, and *Financing the Program*.

### **3. Sunnyvale West Channel, Guadalupe Slough to Highway 101**

### **4. Sunnyvale East Channel, Guadalupe Slough to Interstate 280**

These two adjacent creek projects were combined into one, and are on-target for project completion by 2016. Improvements in the west channel will protect 11 parcels. Upgrades in the east channel will protect 1,618 parcels in a residential area. Total cost for both projects is estimated at \$70 million and will be covered with funding from Clean, Safe Creeks. No additional funding is needed.

### **5. Calabazas Creek, Miller Avenue to Wardell Road**

The District has met its goal to protect 2,483 parcels, which completes flood protection in the Calabazas Creek watershed. The construction of the \$2.1 million project was completed in December of 2011 with local funding.

### **6. Coyote Creek, Montague Expressway to Highway 280**

The District is on-target to meet this project's goals, which includes preparing a planning study, designing a project, and implementing limited construction. The analysis identified the limits of an affordable project on the lower reaches of the study with completion by December 2016. No additional funding is proposed in the Safe Clean Water program.

## **Flood protection projects dependent upon outside funding**

### **7. Upper Guadalupe River, Interstate 280 to Blossom Hill Road**

Due to lack of federal funding, the District is pursuing an alternative "local-funding-only" project which is slightly different from that outlined in the Clean, Safe Creeks plan. The local-only option will complete four different reaches by 2016. This will reduce the frequency of flooding, but parcels in the flood plain will still be vulnerable to flooding from upstream sources until the full project can be completed. The four project reaches include:

- Interstate 280 to the Southern Pacific Railroad Bridge downstream of Willow Street
- The Southern Pacific Railroad Bridge downstream of Willow Street to the Union Pacific Railroad Bridge downstream of Padres Drive
- Northbound Almaden Expressway to Stream Gage 23B near Blue Jay Drive
- Branham Road to Blossom Hill Avenue

Besides working to maximize the benefits of local funding, the District also continues to aggressively pursue outside funding and maintain viable partnerships with the Corps so that the entire Upper Guadalupe River project can be completed by 2020.



The Safe, Clean Water and Natural Flood Protection program includes new local funding to move this project forward toward protecting 6,989 parcels. An outline of planned work and a funding proposal appear in sections four and five of this document.

### **8. Berryessa Creek, Lower Penitencia Creek to Old Piedmont Road**

The District and the Corps are on-target to fulfill this project's outcomes; however, completion relies on the Corps receiving adequate appropriations from Congress in the next several years. Once design and construction are complete, and depending on continued federal appropriations, the project would provide flood damage reduction for about 1,700 homes and businesses by December 2016. The number of parcels protected was reduced from the originally planned 1,814 because the federal benefit-to-cost criterion was not met for the reach that lies upstream of Interstate 680. If only local funding is available, the project area will be reduced to three miles of channel modifications that would protect approximately 100 parcels between the confluence with Lower Penitencia and Montague Expressway.

### **9. Upper Llagas Creek, Buena Vista Avenue to Wright Avenue**

Since 2000, the federal government has reduced its commitment to fund this project from 65 percent to 25 percent. This reduced commitment means additional local funding will be needed to make up the shortfall. The Safe, Clean Water plan proposes additional funding to complete the entire project and take advantage of any available federal participation. When completed (current estimate is 2019), the project would provide 1 percent flood protection to four miles of creeks throughout downtown Morgan Hill and beyond, including 820 homes, 200 businesses, 190 agricultural parcels and six schools/institutions. In the interim, the District will pursue the local-funding-only option as outlined in the Clean, Safe Creeks plan. This includes 3.25 miles of channel construction and a one-mile diversion channel, which would still leave areas of urban Morgan Hill exposed to flooding. The local-funding-only project will be completed by 2016. The revised project plan and funding strategy are proposed in sections four and five of this report.

## **Flood protection maintenance projects**

### **Sediment removal for conveyance capacity**

The IMC and District board is satisfied that the 58,988 cubic yards of sediment removed thus far under Clean, Safe Creeks is maintaining water carrying capacity of flood channels, and fulfilling this program element. The Clean, Safe Creeks plan funds 10 percent of the cost of sediment removal.

### **Funding for maintenance of future projects**

This program goal to support maintenance activities for newly constructed channels continues to be met annually with a specified annual amount set aside. In Fiscal Year 2010-2011, \$496,000 was set aside for future creek maintenance. At the end of fiscal 2011-2012 the total reserve fund for future creek maintenance will be \$4.9 million. Funding for future maintenance is continued in the Safe, Clean Water program.



## Outcome Two: **There is clean, safe water in our creeks and bays**

All commitments and key performance indicators for this outcome have been met and continue to be filled. Projects in the Safe, Clean Water program will continue the District's work to minimize water pollutants—see section four for details. So far the District has:

- Removed 4,200 pounds of mercury from local creeks, streams and the bay
- Prevented other pollutants, toxins and hazardous materials from affecting our local waterways
- Met 100 percent of rapid response requests, cleaning up hazardous materials, litter and graffiti
- Maintained public/private partnerships with Santa Clara County's Green Business Program to help support green jobs and the Santa Clara Valley Urban Runoff Pollution Prevention Program
- Installed treatment systems to reduce methylmercury in Calero, Almaden and Guadalupe reservoirs, and in Lake Almaden
- Conducted annual major cleanup events at 685 locations to improve cleanliness and safety in and around local creeks and streams

## Outcome Three: **Creek and bay ecosystems are protected, enhanced or restored**

The District has exceeded annual goals, and is on track to exceed cumulative goals for this program. The District's grant program was instrumental to the success of Outcome Three, allowing partnerships with local agencies, nonprofits, and schools to encourage new ideas and bring them to fruition in a cost-effective manner. To build on this success, new grants and partnerships are proposed in the Safe, Clean Water program. As of June 30, 2012, Outcome Three has allowed the District to:

- Manage 15,240 acres of vegetation, exceeding the target-to-date of 13,199 acres. As currently managed, the program will exceed the fifteen-year goal of 22,000 acres.
- Restore more than 569 acres of tidal and creekside habitat—more than five times the original 100-acre goal.

## Outcome Four: **There are additional open spaces, trails and parks along creeks and in the watersheds**

Through public and private partnerships, the District's open space program has provided access to over 66 miles of pedestrian-friendly (and wherever possible, bicycle-safe) trails and is poised to attain the program's goal of 70 miles of trails and open space by or before 2016. Projects in the Safe, Clean Water program include provisions to increase open space and trail access. Additional funding for trails is proposed in the Safe Clean Water program.



## Appendix D

# Special Tax Rate Structure

### How the special tax is calculated

The rate structure for calculating the proposed special tax is identical to the Clean, Safe Creeks and Natural Flood Protection structure that it will replace. It is intended to be an equitable basis for the rate structure and is applied consistently throughout the county. Rates are based on the land use (which is directly related to an assigned storm water runoff factor or can be thought of as the estimated percent of hard-scape area on a parcel) and size of each land parcel. The six land use categories, their estimated stormwater runoff factors, and the special tax calculation formula are described in detail below. For 2014 parcel tax rates by land use category, please turn to Table 5-1 on page 5.2.

### Land use categories and estimated stormwater runoff factors

The following six land use categories and estimated stormwater runoff factors will be used to determine the proposed special tax:

#### **Category A: commercial and industrial parcels**

1. Land used for industrial and commercial purposes. This land use is assigned an estimated stormwater runoff factor of 0.8.
2. The minimum tax for this category is applied to parcels of 1/4 acre or less.

#### **Category B: high-density residential parcels, schools, churches, and institutions**

1. Land used for apartment complexes, mobile home parks, condominiums, townhouses, or institutional purposes such as schools and churches. This land use is assigned an estimated stormwater runoff factor of 0.6.
2. With the exception of condominiums and townhouses, the minimum tax for this category is applied to parcels of 1/4 acre or less.
3. For condominiums and townhouses, an average lot size of 0.08 acre for each condominium or townhouse will be used to calculate the annual special tax rate.

#### **Category C: single-family residences and multiple-family units up to 4 units**

1. Land used for single-family residences and multiple-family units up to four units. This land use is assigned an estimated storm water runoff factor of 0.4.
2. The minimum tax for this category is applied to parcels of 1/4 acre or less. Incremental residential land in excess of 1/4 acre is assessed at the Category D rate.



### **Category D: agricultural parcels**

1. Disturbed agricultural land, including irrigated land, orchards, dairies, field crops, golf courses, and similar uses. This land use is assigned an estimated stormwater runoff factor of 0.005.
2. The minimum tax for this category is applied to parcels of 10 acres or less.
3. The per acre rate for this category shall be used for any portion of land in Category C that is in excess of 1/4 acre of a parcel used for single-family residential purposes.

### **Category E: non-utilized agricultural parcels**

1. Urban: Non-utilized agricultural lands, grazing land, salt ponds, undisturbed vacant lands, and parcels used exclusively as well sites for commercial purposes that are located in urban areas.
2. Rural: Non-utilized agricultural land, grazing land, undisturbed vacant land, and parcels used exclusively as well sites for commercial purposes that are located in rural areas.
3. This land use is assigned an estimated storm water runoff factor of 0.0015. The minimum tax for this category is applied to parcels of 10 acres or less. The minimum tax is the same for E-Urban and E-Rural categories. However, for the E-Rural category, incremental lands in excess of 10 acres will be assessed at 1/8 the E-Urban rate.

The 1/8 factor was used because most rangelands in rural areas are either under the Williamson Act contracts, which limit their development potential, or they are located upstream of a District reservoir and impose less potential for flooding downstream. Additionally, the County Assessor's Office had advised that taxes on rangelands are on the average 1/8 of what they would be without Williamson Act provisions.

### **Category F: well parcels for residential uses**

Parcels used exclusively as well sites for residential uses are exempt from the special tax.

*Land use codes assigned to parcels by the County Assessor's Office will be grouped into the above six land use categories for determining the annual special tax for each parcel.*

## **Special tax calculation formula**

The special tax for each land use category will continue at the annually adjusted rate as established under the Clean, Safe Creeks and Natural Flood Protection measure, using the ratio of the runoff factor of each land use category to the runoff factor of Category C.

### **Example Calculation**

If the minimum special tax (for parcels less than 1/4 acre) was set at \$55.84/year for Category C, Single-Family Residences, the special tax (for a one-acre parcel) in Category A, Commercial and Industrial Parcels, can be calculated using the stormwater runoff factors for Category C, Residential, and Category A, Commercial/Industrial, as follows:

$$\$55.84 \text{ /year per } 1/4 \text{ acre} \times (0.8 / 0.4) = \$446.72 \text{ /year per acre}$$

## Appendix E

# Election resolution and documents\*

### RESOLUTION NO. 12-62

PROVIDING FOR THE CONTINUATION AND LEVY OF A  
SPECIAL TAX TO PAY THE COST OF A SAFE, CLEAN WATER  
AND NATURAL FLOOD PROTECTION PROGRAM  
IN THE COMBINED FLOOD CONTROL ZONE OF THE  
SANTA CLARA VALLEY WATER DISTRICT SUBJECT,  
NEVERTHELESS, TO SPECIFIED LIMITS AND CONDITIONS

WHEREAS, Santa Clara Valley Water District (District) policy is to ensure current and future water supplies and provide healthy, clean and reliable water in Santa Clara County; and

WHEREAS, District policy is to ensure reliable, clean water supplies for Santa Clara County and to protect Santa Clara County creeks, reservoirs, Monterey Bay, and San Francisco Bay from contaminants; and

WHEREAS, District policy is to provide for flood water and storm water flood protection to residents, businesses, visitors, public highways, and the watercourses flowing within the District; and

WHEREAS, District policy is to protect our water supply, pipelines and local dams from earthquakes and natural disasters; and

WHEREAS, the District maintains a flood protection system of levees, channels, drains, debris basins and other improvements upon which the lives and property of District residents depend, which said improvements must be kept in a safe and effective condition; and

WHEREAS, the District policy is to protect, enhance and restore healthy Santa Clara County creeks, watersheds and baylands ecosystems; and


WHEREAS, the need for protection of Santa Clara County water supplies, creeks, watersheds and baylands has increased since the voters passed the Clean, Safe Creeks and Natural Flood Protection Plan in 2000; and

WHEREAS, the District policy is to engage in partnerships with the community to provide open spaces, trails and parks along Santa Clara County creeks and watersheds; and

WHEREAS, the California State Legislature has authorized the District to levy a special tax on each parcel of property within the District or any zone or zones thereof upon receiving the approving vote of a two-thirds majority of the electorate of the District or zones therein; and

WHEREAS, the purpose of the special tax is to supplement other available but limited revenues to keep said improvements in a safe and effective condition; to enable the District to respond to emergencies; to perform maintenance and repair; to acquire, restore and preserve habitat; to provide recreation; to conduct environmental education; to protect and improve water quality; and, to construct and operate flood protection and storm drainage facilities; including in each case the cost of financing such activities; and

\* The election resolution and associated documents are included as a reproduction of the actual election documents and are not an exact copy.



WHEREAS, State California Environmental Quality Act (CEQA) Guidelines section 15378(b)(4), states that government funding mechanisms are not projects subject to the requirements of CEQA.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Santa Clara Valley Water District as follows:


FIRST: The Board hereby finds that since (a) the management of creeks, watersheds and baylands to ensure safe, clean water and to protect, enhance and restore healthy ecosystems; and the construction and management of flood protection services, are made necessary by stormwater runoff, and (b) the lands from which runoff derives are benefitted by provision of means of disposition which alleviates or ends the damage to other lands affected thereby, by direct protection of loss of property, and other indirect means which include improved aesthetics and quality of life, the basis on which to levy the special tax is at fixed and uniform rates per area and county or city designated land use of each parcel, taxed as such parcel is shown on the latest tax rolls.

SECOND: Pursuant to the authority of Section 3 of the District Act, a Combined Zone consisting of the aggregate metes and bounds descriptions of Zones One, Two, Three, Four and Five is presently existing.

THIRD: A special District Election will be called within said District, on the proposition of levy of a special tax.


FOURTH: Subject to approval by two-thirds of the electors of the District voting at such election and pursuant to the authority vested in the Board, there is hereby established a special tax as authorized by this resolution, the proceeds of which shall be used solely for the purpose of supporting the priorities of the Safe, Clean Water and Natural Flood Protection program. The priorities are summarized in Table 1. The Safe, Clean Water and Natural Flood Protection Program Report (hereafter "Report") generally describes the priorities. This tax shall be instituted with the following provisions:


- A. The Chief Executive Officer (CEO) or designee of the District is directed to cause a written Report to be prepared for each fiscal year for which a special tax is to be levied and to file and record the same, all as required by governing law. Said Report shall include the proposed special tax rates for the upcoming fiscal year at any rate up to the maximum rate approved by the voters. A special fund shall be established into which proceeds from the tax shall be deposited. Proceeds from the tax may used only for the Safe, Clean Water and Natural Flood Protection Program.
- B. The CEO, or designee of the District may cause the special tax to be corrected in the same manner as assessor's or assessee's errors may be corrected but based only upon any or all of the following:
  - 1. Changes or corrections in ownership of a parcel;
  - 2. Changes or corrections of address of an owner of a parcel;
  - 3. Subdivision of an existing parcel;

- 
4. Changes or corrections in the use of all or part of a parcel;
  5. Changes or corrections in the computation of the area of a parcel;
  6. As to railroad, gas, water, telephone, cable television, electric utility right of way, electric line right of way or other utility right of way properties.

Changes and corrections are not valid unless and until approved by the Board.

- C. The Clerk of the Board shall immediately file certified copies of the final determination of special taxes and confirming resolution with the Auditor-Controller of the County of Santa Clara and shall immediately record with the County Recorder of said County a certified copy of the resolution confirming the special tax.
- D. The special tax for each parcel set forth in the final determination by the Board shall appear as a separate item on the tax bill and shall be levied and collected at the same time and in the same manner as the general tax levy for county purposes. Upon recording of the resolution confirming the special tax such special tax shall be a lien upon the real property affected thereby.
- E. Failure to meet the time limits set forth in this resolution for whatever reason shall not invalidate any special tax levied hereunder.
- F. No special tax for the Safe, Clean Water and Natural Flood Protection Program shall be imposed upon a federal or state or local governmental agency. With said exception, a Safe, Clean Water and Natural Flood Protection Program special tax is levied on each parcel of real property in the five Flood Control Zones of the District subject to this resolution for the purposes stated in the Report and in this Resolution. Except for the minimum special tax as hereinafter indicated, the special tax for each parcel of real property in each such zone is computed by determining its area (in acres or fractions thereof) and land use category (as hereinafter defined) and then multiplying the area by the special tax rate applicable to land in such land use category. A minimum special tax may be levied on each parcel of real property having a land area up to 0.25 acre for Groups A, B, and C, up to 10 acres for Groups D and E Urban and, for Group E Rural, the minimum special tax shall be that as calculated for the E Urban category.
- G. Land use categories for each parcel of land in the District are defined and established as follows:
  - Group A: Land used for commercial or industrial purposes.
  - Group B: Land used for institutional purposes such as churches and schools or multiple dwellings in excess of four units, including apartment complexes, mobile home parks, recreational vehicle parks, condominiums, and townhouses.
  - Group C: (1) Land used for single family residences and multiple family units up to four units. (2) The first 0.25 acre of a parcel of land used for single family residential purposes.

- 
- Group D: (1) Disturbed agricultural land, including irrigated land, orchards, dairies, field crops, golf courses and similar uses. (2) The portion of the land, if any, in excess of 0.25 acre of a parcel used for single family residential purposes.
- Group E: Vacant undisturbed land (1) in urban areas and (2) in rural areas including dry farmed land, grazing and pasture land, forest and brush land, salt ponds and small parcels used exclusively as well sites for commercial purposes.
- Group F: Parcels used exclusively as well sites for residential uses are exempt from the special tax.
- H. The special tax amounts applicable to parcels in the various land uses shall be as prescribed by the Board of Directors in each fiscal year (July 1 through June 30) beginning with fiscal year 2013-2014 all as stated above, in the Report and as required by law; provided, that the annual basic special tax unit (single family residential parcel) shall not exceed a maximum limit of \$56, as adjusted by the compounded percentage increases of the San Francisco-Oakland-San Jose Consumer Price Index (CPI-U) for all Urban Consumers (or an equivalent index published by a government agency) in the year or years since April 30, 2013; provided, however that appropriate amounts may be increased in any year by up to the larger of the percentage increase of the San Francisco-Oakland-San Jose Consumer Price Index for all Urban Consumers in the preceding year or three percent (3%); and provided, further, however that in any period, not exceeding three years, immediately following a year in which the Governor of the State of California or the President of the United States has declared an area of said zones to be a disaster area by reason of flooding or other natural disaster, then to the extent of the cost of repair of District facilities damaged by such flooding or other natural disaster, the maximum tax rate shall be the percentage increase in CPI-U plus 4.5 percent and provided, that special taxes for the Safe, Clean Water and Natural Flood Protection Program shall be levied for a total of 15 years and, therefore, shall not be levied beyond June 30, 2028.
- I. Pursuant to the State California Environmental Quality Act (CEQA) Guidelines section 15378(b)(4), adoption of this resolution for continuation of the parcel tax and as a government funding mechanism, is not a project subject to the requirements of CEQA. Prior to commencement of any project included in the Safe, Clean Water and Natural Flood Protection Program, any necessary environmental review required by CEQA shall be completed.
- J. The Board of Directors may direct that proposed projects in the Safe, Clean Water and Natural Flood Protection Program be modified or not implemented depending upon a number of factors, including federal and state funding limitations and the analysis and results of CEQA environmental review. The Board of Directors must hold a formal, public hearing on the matter, which will be noticed by publication and notification to interested parties, before adoption of any such decision to modify or not implement a project.



K. In the event that the county or city designated land use for a parcel is different than the actual land use, the CEO of the District may, pursuant to written policies and procedures, cause the special tax to be adjusted based upon any or all of the following:


1. The parcel owner shall provide the District a claim letter stating that the present actual land use is different than the county or city designated land use, including an estimate of the portion of the parcel that is different than the designated land use. Such claim is subject to investigation by the District as to the accuracy of the claim. Parcel owner shall furnish information deemed necessary by the District to confirm the actual uses and areas in question which may include, but not be limited to, a survey by a licensed surveyor.
2. The parcel owner shall request the District to inspect the parcel and reevaluate the parcel tax.
3. The parcel owner shall notify the District after a substantial change in the actual land use occurs, including a new estimate of the portion of the parcel that is different than the designated land use.
4. The District may inspect and verify the actual land use for these parcels on a regular basis and will notify the appropriate parcel owners when it is determined that the actual land use has matched a county or city designated land use. The District shall then correct the special tax rates for these parcels accordingly.

L. Pursuant to state law, the District may provide an exemption from the special tax for low income owner-occupied residential properties for taxpayer-owners who are 65 years of age or older, the following shall apply:

Residential parcels where the total annual household income does not exceed 75 percent of the latest available figure for state median income at the time the annual tax is set, and such parcel is owned and occupied by at least one person who is aged 65 years or older is qualified to apply for an exemption from the applicable special tax.

M. An external, independent monitoring committee shall be appointed by the District Board of Directors to conduct an annual audit and provide an annual Report to the Board of Directors regarding implementation of the intended results of the Safe, Clean Water and Natural Flood Protection Program; at the fifth and tenth anniversaries of the Safe, Clean Water and Natural Flood Protection Program, the committee will identify to the District Board of Directors such modifications as may be reasonably necessary to meet the priorities of the Safe, Clean Water and Natural Flood Protection Program.

N. During the Safe, Clean Water and Natural Flood Protection Program period, the Board of Directors shall conduct at least two professional audits of the Program to provide for accountability and transparency.

- 
- O. Upon entering into effect, the Safe, Clean Water and Natural Flood Protection Program parcel tax authorized by this resolution and placed on the ballot by RESOLUTION NO. 12-63 will repeal and replace the Clean, Safe Creeks and Natural Flood Protection Plan parcel tax approved by the voters in 2000. On the date that the parcel tax authorized by this resolution and RESOLUTION NO. 12-63 goes into effect, the Safe, Clean Water and Natural Flood Protection Program will replace in its entirety the Clean, Safe Creeks and Natural Flood Protection Plan; any tax payments already made by voters and collected for use by the Water District for the Clean, Safe Creeks and Natural Flood Protection Plan will be used to achieve priorities identified in the Safe, Clean Water and Natural Flood Protection Program. Funding for capital projects currently identified in the Clean, Safe Creeks and Natural Flood Protection Plan, will continue under the Safe, Clean Water and Natural Flood Protection Program to meet previous commitments. All other projects and programs identified in the Clean, Safe Creeks and Natural Flood Protection Plan will be replaced by comparable projects or programs with similar or expanded obligations under the Safe, Clean Water and Natural Flood Protection Program.

PASSED AND ADOPTED by the Board of Directors of Santa Clara Valley Water District by the following vote on July 24, 2012:

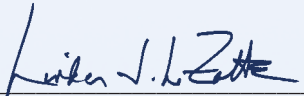
AYES: Directors T. Estremera, P. Kwok, D. Gage, J. Judge,  
R. Santos, B. Schmidt, L. LeZotte

NOES: Directors None

ABSENT: Directors None

ABSTAIN: Directors None

SANTA CLARA VALLEY WATER DISTRICT

By:   
LINDA J. LEZOTTE  
Chair/Board of Directors

ATTEST: MICHELE L. KING, CMC

  
Clerk/Board of Directors

TABLE - 1 RESOLUTION NO. 2012 - 62

Providing for the continuation and levy of a special tax to pay the cost of a Safe, Clean Water and Natural Flood Protection Program in the combined flood control zone of the Santa Clara Valley Water District subject, nevertheless, to specified limits and conditions

### Summary of Key Performance Indicators for the 15-Year Program

Project	Key Performance Indicator
<b>Priority A: Ensure a Safe, Reliable Water Supply</b>	
A1 Main and Madrone Avenue Pipelines Restoration	1. Restore transmission pipelines to full operating capacity of 37 cubic feet per second from Anderson Reservoir. 2. Restore ability to deliver 20 cubic feet per second to Madrone Channel.
A2 Safe, Reliable Water Grants and Partnerships	1. Award up to \$1 million to test new conservation activities. 2. Increase number of schools in Santa Clara County in compliance with SB 1413 and the Healthy Hunger-Free Kids Act, regarding access to drinking water by awarding 100% of eligible grant requests for the installation of hydration stations; a maximum of 250 grants up to \$254k. 3. Reduce number of private well water users exposed to nitrate above drinking water standards by awarding 100% of eligible rebate requests for the installation of nitrate removal systems; a maximum of 1000 rebates up to \$702k.
A3 Pipeline Reliability Project	1. Install 4 new line valves on treated water distribution pipelines.

Project	Key Performance Indicator
<b>Priority B: Reduce Toxins, Hazards, and Contaminants in our Waterways</b>	
B1 Impaired Water Bodies Improvement	<ol style="list-style-type: none"> <li>1. Operate and maintain existing treatment systems in 4 reservoirs to remediate regulated contaminants, including mercury.</li> <li>2. Prepare plan for the prioritization of pollution prevention and reduction activities.</li> <li>3. Implement priority pollution prevention and reduction activities identified in the plan in 10 creeks.</li> </ol>
B2 Inter-Agency Urban Runoff Program (includes Santa Clara Valley Urban Runoff Pollution Prevention and South County programs)	<ol style="list-style-type: none"> <li>1. Install at least 2 and operate 4 trash capture devices at stormwater outfalls in Santa Clara County.</li> <li>2. Maintain partnerships with cities and County to address surface water quality improvements.</li> <li>3. Support 5 pollution prevention activities to improve surface water quality in Santa Clara County either independently or collaboratively with south county organizations.</li> </ol>
B3 Pollution Prevention Partnerships and Grants	<ol style="list-style-type: none"> <li>1. Provide 7 grant cycles and 5 partnerships that follow pre-established competitive criteria related to preventing or removing pollution.</li> </ol>
B4 Good Neighbor Program: Illegal Encampment Cleanup	<ol style="list-style-type: none"> <li>1. Perform 52 annual clean-ups for the duration of the Safe, Clean Water program to reduce the amount of trash and pollutants entering the streams.</li> </ol>
B5 Hazardous Materials Management and Response	<ol style="list-style-type: none"> <li>1. Respond to 100% of hazardous materials reports requiring urgent on-site inspection in two hours or less.</li> </ol>
B6 Good Neighbor Program: Remove graffiti and litter	<ol style="list-style-type: none"> <li>1. Conduct 60 clean-up events (4 per year).</li> <li>2. Respond to requests on litter or graffiti cleanup within 5 working days.</li> </ol>
B7 Support Volunteer Cleanup Efforts and Education	<ol style="list-style-type: none"> <li>1. Provide 7 grant cycles and 3 partnerships that follow pre-established competitive criteria related to cleanups, education and outreach, and stewardship activities.</li> <li>2. Fund District support of annual National River Clean Up day, California Coastal Clean Up Day, the Great American Pick Up, and fund the Adopt-A-Creek Program.</li> </ol>

Project	Key Performance Indicator
<b>Priority C: Protect Our Water Supply and Dams From Earthquakes and Other Natural Disasters</b>	
C1 Anderson Dam Seismic Retrofit	<ol style="list-style-type: none"> <li>1. Provide portion of funds, up to \$45 million, to help restore full operating reservoir capacity of 90, 373 acre-feet.</li> </ol>
C2 Emergency Response Upgrades	<ol style="list-style-type: none"> <li>1. Map, install, and maintain gauging stations and computer software on seven flood-prone reaches to generate and disseminate flood warnings.</li> </ol>

Project	Key Performance Indicator
<b>Priority D: Restore Wildlife Habitat and Provide Open Space Access</b>	
D1 Management of Revegetation Projects	1. Maintain a minimum of 300 acres of revegetation projects annually to meet regulatory requirements and conditions.
D2 Revitalize Riparian, Upland and Wetland Habitat	1. Revitalize at least 21 acres, guided by the 5 Stream Corridor Priority Plans, through native plant revegetation and removal of invasive exotic species. 2. Provide funding for revitalization of at least 7 of 21 acres through community partnerships. 3. Develop at least 2 plant palettes for use on revegetation projects to support birds and other wildlife.
D3 Partnerships and Grants to Restore Wildlife Habitat and Provide Access to Trails	1. Develop 5 Stream Corridor Priority Plans to prioritize stream restoration activities. 2. Provide 7 grant cycles and additional partnerships for \$21 million that follow pre-established criteria related to the creation or restoration of wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife, and providing new public access to trails.
D4 Fish Habitat and Passage Improvements	1. Complete planning and design for two creek/lake separations. 2. Construct one creek/lake separation project in partnership with local agencies. 3. Use \$6 million for fish passage improvements. 4. Conduct study of all major steelhead streams in the County to identify priority locations for installation of large woody debris and gravel as appropriate. 5. Install large woody debris and/or gravel at a minimum of 5 sites (1 per each of 5 major watersheds).
D5 Ecological Data Collection and Analysis	1. Establish new or track existing ecological levels of service for streams in 5 watersheds. 2. Re-assess streams in 5 watersheds to determine if ecological levels of service are maintained or improved.
D6 Creek Restoration and Stabilization	1. Construct 3 geomorphic designed projects to restore stability and stream function by preventing incision and promoting sediment balance throughout the watershed.
D7 Partnerships for the Conservation of Habitat Lands	1. Provide up to \$8 million for the acquisition of property for the conservation of habitat lands.
D8 South Bay Salt Ponds Restoration Partnership	1. Establish agreement with the US Fish and Wildlife Service to reuse sediment at locations to improve the success of Salt Pond restoration activities. 2. Construct site improvements up to \$4 million to allow for transportation and placement of future sediment.

Project	Key Performance Indicator
<b>Priority E: Provide Flood Protection to Homes, Businesses, Schools, Streets and Highways</b>	
E1.1 Vegetation Control for Capacity	1. Maintain 90% of improved channels at design capacity.
E1.2 Sediment Removal for Capacity	
E1.3 Maintenance of Newly Improved Creeks	
E1.4 Vegetation Management for Access	1. Provide vegetation management for 6,120 acres along levee & maintenance roads.
E2.1 Coordination with Local Municipalities on Flood Communication	1. Coordinate with agencies to incorporate District-endorsed flood emergency procedures into their Emergency Operations Center plans.
E2.2 Flood-Fighting Action Plans	1. Complete 5 flood-fighting action plans (one per major watershed).
E3 Flood Risk Reduction Studies	1. Complete engineering studies on 7 creek reaches to address 1% flood risk. 2. Update floodplain maps on a minimum of 2 creek reaches in accordance with new FEMA standards.
E4 Upper Penitencia Creek	1. With federal and local funding, construct a flood protection project to provide 1 percent flood protection to 5,000 homes, businesses and public buildings. 2. With local funding only, acquire all necessary right-of-ways and construct a 1 percent flood protection project from Coyote Creek confluence to King Road.
E5 San Francisquito Creek	1. With federal and local funding, protect more than 3,000 parcels by providing 1 percent flood protection. 2. With local funding only, protect approximately 3,000 parcels from flooding (100-year protection downstream of HWY 101, 50-year protection upstream of HWY 101).
E6 Upper Llagas Creek	1. With federal and local funding, provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat. 2. With local funding only, provide 100-year flood protection for Reach 7 only (up to W. Dunne Avenue in Morgan Hill). A limited number of homes and businesses will be protected.
E7 San Francisco Bay Shoreline Study	1. Provide portion of the local share of funding for planning and design phases for the former salt production ponds and Santa Clara County shoreline area. 2. Provide portion of the local share of funding toward estimated cost of initial project phase (Economic Impact Area 11).
E8 Upper Guadalupe River	1. With federal and local funding, construct a flood protection project to provide 1 percent flood protection to 6,280 homes, 320 businesses and 10 schools and institutions. 2. With local funding only, construct flood protection improvements along 4,100 feet of Guadalupe River between SPRR crossing, downstream of Willow Street, to UPRR crossing, downstream of Padres Drive. Flood damage will be reduced; however, protection from the 1-percent flood is not provided until completion of the entire Upper Guadalupe River Project.



AMENDED  
RESOLUTION NO. 12-63

CALLING A SPECIAL ELECTION TO BE HELD  
IN THE  
SANTA CLARA VALLEY WATER DISTRICT ON NOVEMBER 6, 2012  
REQUESTING SERVICES OF REGISTRAR OF VOTERS,  
REQUESTING CONSOLIDATION OF ELECTIONS, AND SPECIFYING  
CERTAIN PROCEDURES FOR THE CONSOLIDATION ELECTION

WHEREAS, Santa Clara Valley Water District (District) RESOLVED, by the Board of Directors of Santa Clara Valley Water District (District), as follows:

FIRST: A special election is hereby called within said District, which election is to be consolidated with the general election to be held on November 6, 2012, to submit to the qualified electors of the District the following question:

Safe, Clean Water Program


To:

- Ensure safe, reliable water supply;
- Reduce toxins, hazards and contaminants in waterways;
- Protect water supply and dams from earthquakes and natural disasters;
- Restore wildlife habitat and provide open space;
- Provide flood protection to homes, schools and businesses;
- Provide safe, clean water in creeks and bays,

Shall Santa Clara Valley Water District renew an existing, expiring parcel tax without increasing rates, and issue bonds, described in Resolution 12-62, with independent citizen oversight and annual audits?

SECOND: The Registrar of Voters is requested to give notice of said election in accordance with law and to perform all other acts which are required for the holding and conducting of said election.

THIRD: The Board of Supervisors of the County of Santa Clara is hereby requested to order the consolidation of the special District election with the other elections to be held on November 6, 2012, and to provide the election precincts, polling places, and voting booths which shall in every case be the same, and that there shall be only one set of election officers in each of said precincts; and to further provide that the question set forth above shall be set forth in each form of ballot to be used at said election. Said Board of Supervisors is further requested to order the Registrar of Voters (a) to set forth on all sample ballots relating to said consolidation elections, to be mailed to the qualified electors of the District, the question set forth above and (b) to provide absentee voter ballots for said consolidation election for use by qualified electors of said District who are entitled thereto, in the manner provided by law.



FOURTH: The Registrar of Voters is hereby authorized and requested to canvass, or cause to be canvassed, as provided by law, the returns of said special district election with respect to the total votes cast for and against said question and to certify such canvass of the votes cast to the Board of Directors of Santa Clara Valley Water District.

FIFTH: The Clerk of this Board is hereby authorized and directed to certify to the due adoption of this resolution and to transmit a copy hereof so certified with the Registrar of Voters of the County.

SIXTH: Resolution No. 12-62 and attached Table 1 will comprise the full text of this ballot measure.

SEVENTH: The District recognizes that the County will incur additional costs because of the consolidation of the election on this measure with the November 6, 2012 election and agrees to reimburse the County for those relevant, additional costs. The Chief Executive Officer is hereby authorized and directed to expend the necessary funds to pay for the District's cost of placing the measure on the election ballot.

PASSED AND ADOPTED by the Board of Directors of Santa Clara Valley Water District by the following vote on August 8, 2012:


AYES: Directors T. Estremera, P. Kwok, D. Gage, J. Judge,  
R. Santos, B. Schmidt, L. LeZotte

NOES: Directors None

ABSENT: Directors None

ABSTAIN: Directors None

SANTA CLARA VALLEY WATER DISTRICT

By:   
LINDA J. LEZOTTE  
Chair/Board of Directors

ATTEST: MICHELE L. KING, CMC

  
Clerk/Board of Directors



## Appendix F

# Glossary

**1 percent flood** A flood that has a 1 percent chance of occurring in any given year; also referred to as a 100-year flood.

**50-year flood** A flood that has a 2 percent chance of occurring in any given year.

**100-year flood** A flood that has a chance of occurring an average of once every 100 years; also referred to as a 1 percent flood.

**Acre-feet (AF)** An acre-foot of water would cover one acre of land to a depth of one foot. One acre-foot equals approximately 325,000 gallons, the average amount of water used by two families of five in one year.

**Aquifer** An underground geologic formation of rock, soil, or sediment that is saturated with water; an aquifer stores groundwater.

**Bypass channel** A channel built to carry excess water from a stream, or to divert water from the main channel.

**Ecosystem** An ecological community of plants, animals, and microorganisms in their environment, functioning together as a unit.

**Environmental enhancement** Action taken by the District that benefits the environment is not mitigation, and is undertaken voluntarily. Enhancement actions may include environmental preservation or creation. In instances where enhancements are located in the same vicinity as a mitigation project, actions must exceed required compliance activities to be considered environmental enhancements.

**Erosion** The process by which soil is removed from one place by forces such as water or construction activity, and eventually deposited at a new place as sediment.

**Fisheries** An area with an associated fish or aquatic population.

**Fish passage** A generic term for several methods incorporated into flood protection projects which allow native fish species to travel upstream to spawn.

**Flood** A temporary inundation of inland or tidal waters onto normally dry land areas.

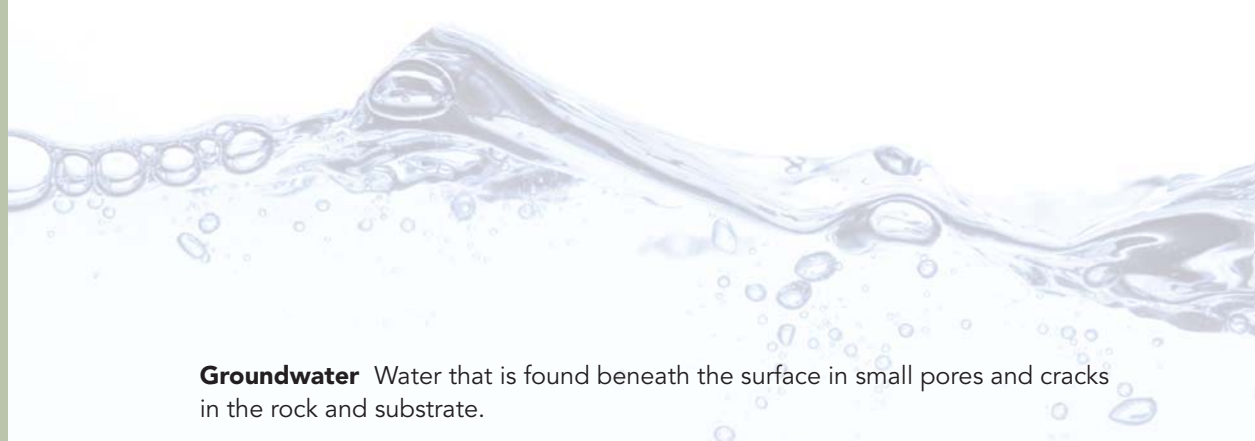
**Flood conveyance capacity** The maximum amount of water that can flow through a channel, stream, or culvert before there is flooding of surrounding properties.

**Floodplain** The low, flat, periodically flooded lands adjacent to creeks and rivers.

**Floodplain management** A city or county program of corrective, preventative and regulatory measures to reduce flood damage and encourage the natural and beneficial functions of floodplains. Careful local management of development in the floodplains results in construction practices that can reduce flood damages.

**Floodwall** Walls used as levees to contain floodwaters within a stream. Floodwalls are used when right-of-way is limited.

**Geomorphology/geomorphic** The study of the natural relationship between a stream and its bank and bed; pertaining to those processes that affect the form or shape of the surface of the earth, including creeks and streams.



**Groundwater** Water that is found beneath the surface in small pores and cracks in the rock and substrate.

**Habitat** The specific, physical location or area in which a particular type of plant or animal lives. To be complete, an organism's habitat must provide all of the basic requirements of life for that organism.

**Hydraulics** The properties and behaviors of fluids, such as water.

**Hydrology** The behavior (properties, distribution, and circulation) of water in the atmosphere, on land, and in the soil.

**Impaired water bodies** Waters that are too polluted or otherwise degraded to meet the water quality standards set by the State of California. Under the federal Clean Water Act, California is required to develop lists of impaired water bodies, including creeks, streams, and lakes.

**Invasive plants** A non-native plant species that has spread into native or minimally managed plant communities (habitats).

**Large woody debris (LWD)** The logs, sticks, branches, and other wood that falls into streams and rivers. This debris can influence the flow and shape of the stream channel. LWD plays an important biological role in streams by increasing channel complexity, enhancing fish habitat, and creating diversity in the food web.

**Levee** An embankment constructed to provide flood protection from seasonal high water.

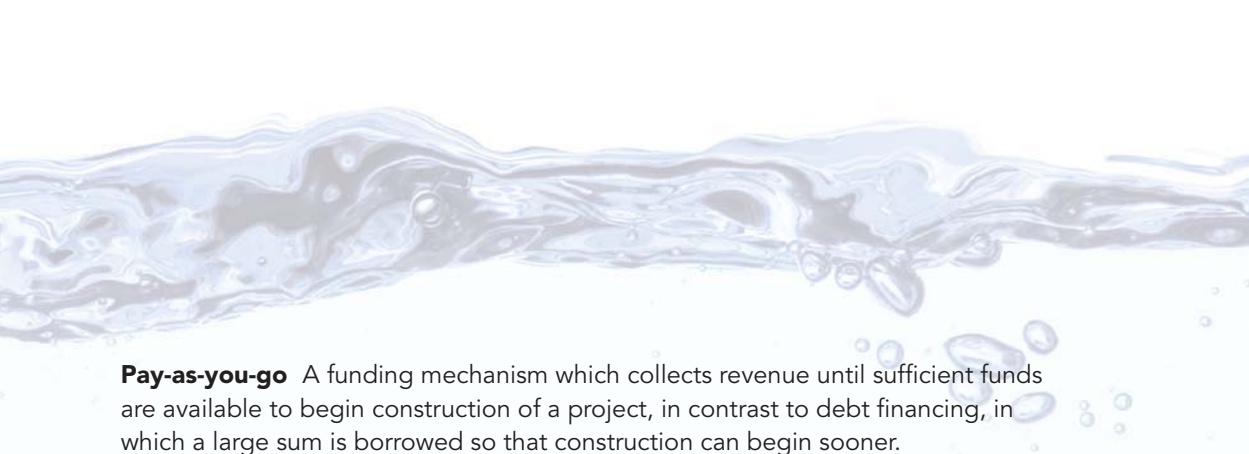
**Methylation** The complex process by which inorganic mercury in surface water is converted to toxic methylmercury, the only form of mercury that accumulates appreciably in fish.

**Methylmercury** An organic, highly toxic form of mercury that easily bioaccumulates in organisms, increasing in concentration as it travels up the food chain. Because of mercury contamination the public is advised against consuming fish caught in some Santa Clara County reservoirs and ponds.

**Mitigation** Action taken to fulfill CEQA, NEPA or permit requirements and court-mandated mitigation to avoid, minimize, rectify or reduce adverse environmental impact(s) or compensate for the impacts by replacing or providing substitute resources or environments.

**Modified floodplain** A flood protection technique where land adjacent to a creek is lowered, allowing floodwaters to spread out over a wider area while containing the flow, and reducing the risk of damaging floods. A modified floodplain is often planted with native riparian species.

**Natural flood protection** A multiple-objective approach to providing environmental quality, community benefit and protection from creek flooding in a cost-effective manner through integrated planning and management that considers the physical, hydrologic and ecologic functions and processes of streams within the community setting.



**Pay-as-you-go** A funding mechanism which collects revenue until sufficient funds are available to begin construction of a project, in contrast to debt financing, in which a large sum is borrowed so that construction can begin sooner.

**Permitting requirements** A mechanism used to enforce state and federal laws that protect environmentally sensitive areas. Before moving forward on projects, the District is required to obtain permits from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, NOAA Fisheries, Regional Water Quality Control Board, and the California Department of Fish and Game. Each permit gives the permitting agency an opportunity to attach specific measures to the project to reduce impact on the environment.

**Plant pallet** A master list of appropriate plants that can be drawn from to create a specific assemblage of plants well-matched to a particular area or project's physical, hydrological and ecological conditions.

**Preservation** Action taken to protect an ecosystem or habitat area by removing a threat to that ecosystem or habitat, including regulatory actions and the purchase of land and easements.

**Reach (creek)** A portion of a creek or watercourse usually defined by both an upstream and a downstream unit.

**Recharge** The addition of new water to an aquifer or to the zone of saturation. See groundwater.

**Restoration/restore** Action taken by the District, to the extent practicable, toward the re-establishment as closely as possible of an ecosystem's pre-disturbance structure, function, and value, where it has been degraded, damaged, or otherwise destroyed

**Revegetate** To re-establish vegetation in areas which have been disturbed by project construction.

**Revitalize** Improve habitat value, particularly in an effort to connect contiguous creek reaches of higher value, by removing invasive, non-native vegetation and diseased and/or non-thriving specimens, applying mulch to suppress weed competition, revegetating sites with native plants, and installing predation prevention measures such as browse protection or cautionary fencing to reduce impacts from animals and vandals.

**Riparian** Pertaining to the banks and adjacent terrestrial habitat of streams, creeks, or other freshwater bodies and watercourses.

**Riparian corridor** The riverside or riverine environment next to a stream channel.

**Riparian ecosystem** A natural association of soil, plants and animals existing within the floodplain of a stream, and dependent for their survival on high water tables and river flow.



**Sediment/sedimentation** Mineral or organic material that is deposited by moving water and settles at the bottom of a waterway. Sediment in a lake, reservoir or stream can either be suspended in the water column or deposited on the bottom. Sediment usually consists of eroded material from the watershed, precipitated minerals, and the remains of aquatic organisms.

**Special status species** Any species which is listed, or proposed for listing, as threatened or endangered by the U.S. Fish and Wildlife Service or National Marine Fisheries Service under the provisions of the Endangered Species Act; any species designated by the U.S. Fish and Wildlife Service as a "listed," "candidate," "sensitive," or "species of concern," and any species which is listed by the State of California in a category implying potential danger of extinction.

**Special tax** Any tax imposed for specific purposes, or any tax imposed by a special purpose district or agency, such as the Santa Clara Valley Water District. A special district contemplating a special tax levy must hold a noticed public hearing and adopt an ordinance or resolution prior to placing the tax on the ballot. The ordinance or resolution must specify the purpose of the tax, the rate at which it will be imposed, the method of collection, and the date of the election to approve the tax levy. Approval by a two-thirds vote of the city, county or district electorate is necessary for adoption.

**Stewardship** To entrust the careful and responsible management of the environment and natural resources to one's care for the benefit of the greater community.

**Stream Corridor Priority Plan** A document which identifies priorities for stream restoration and which can be a source of information to guide restoration actions by all parties.

**Threatened species** A species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

**Total Maximum Daily Loads (TMDLs)** The maximum pollutant load a waterbody can receive (loading capacity) without violating water quality standards.

**Urban runoff** The water that runs over the impervious areas in cities, collecting pollutants as it flows. Runoff is recognized as a major source of water impairment.

**Watershed** Land area from which water drains into a major body of water.

**Watershed stewardship** Protecting and enhancing the county's creeks, streams and water bodies in order to preserve a vibrant, healthy ecosystem, and provide recreational opportunities when appropriate.

**WebEx** A system for holding meetings over the web which allows anyone with an internet connection to participate in real time with two-way communication.

**Wetland** Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions, as well as the diverse wildlife species that depend on this habitat.

Appendix G

Chart G-1 Safe, Clean Water Projects Summary

Project		Project Description	Key Performance Indicator (KPI)	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water	Estimated Percent Funding from Safe, Clean Water
Priority A: Ensure a safe, reliable water supply						
A1	Main and Madrone Avenue Pipelines Restoration	Restore the Main and Madrone Pipelines to full operating capacity to provide the means to utilize another reliable water source (Anderson Reservoir) to supply water to the Main Avenue Ponds and Madrone Channel, allow for greater flows to the Main Avenue Ponds and the Madrone Channel, and maximize imported water flows to the treatment plants. Would reduce energy use at the Coyote Pumping Plant.	1. Restore transmission pipelines to full operating capacity of 37 cubic feet per second from Anderson Reservoir. 2. Restore ability to deliver 20 cubic feet per second to Madrone Channel.	\$5.4 million	\$5.4 million	100%
A2	Safe, Reliable Water Grants and Partnerships	Conduct comprehensive water supply grant program, including: 1. Water conservation grants 2. Drinking water for schools grants 3. Rebates to private well owners for treatments systems to remove excess nitrate from drinking water	1. Award up to \$1 million to test new conservation activities. 2. Increase number of schools in Santa Clara County in compliance with SB 1413 and the Healthy Hunger-Free Kids Act, regarding access to drinking water by awarding 100% of eligible grant requests for the installation of hydration stations; a maximum of 250 grants up to \$254,000. 3. Reduce number of private well water users exposed to nitrate above drinking water standards by awarding 100% of eligible rebate requests for the installation of nitrate removal systems; a maximum of 1,000 rebates up to \$702,000.	\$2.2 million	\$2.2 million	100%
A3	Pipeline Reliability Project	This project constructs four line valves on treated water distribution pipelines. The line valves will allow the District to isolate sections of pipelines for scheduled maintenance or for repairs following a catastrophic event such as a major earthquake. The line valves will allow the District to maintain deliveries to customers upstream of pipeline segments that are damaged or down for maintenance.	1. Install 4 new line valves on treated water distribution pipelines.	\$7.3 million	\$7.3 million	100%
Priority B: Reduce toxins, hazards and contaminants in our waterways						
B1	Impaired Water Bodies Improvement	Reduce and remove sources of regulated contaminants, including mercury, for compliance with Regional Water Quality Control Board standards.	1. Operate and maintain existing treatment systems in 4 reservoirs to remediate regulated contaminants, including mercury. 2. Prepare plan for the prioritization of pollution prevention and reduction activities. 3. Implement priority pollution prevention and reduction activities identified in the plan in 10 creeks.	\$21 million	\$21 million	100%
B2	Inter-Agency Urban Runoff Program (includes Santa Clara Valley Urban Runoff Pollution Prevention and South County programs)	Maintain District compliance with the regulatory requirements for stormwater related issues.	1. Install at least 2 and operate 4 trash capture devices at stormwater outfalls in Santa Clara County. 2. Maintain partnerships with cities and County to address surface water quality improvements. 3. Support 5 pollution prevention activities to improve surface water quality in Santa Clara County either independently or collaboratively with south county organizations.	\$34.4 million	\$11.4 million	33%
B3	Pollution Prevention Partnerships and Grants	Conduct grants and partnerships to reduce contaminants, such as pharmaceuticals, in surface or groundwater.	1. Provide 7 grant cycles and 5 partnerships that follow pre-established competitive criteria related to preventing or removing pollution.	\$7.3 million	\$7.3 million	100%
B4	Good Neighbor Program: Illegal Encampment Cleanup	Reduce amount of trash and other pollutants entering the stream and reduce damage to District facilities from illegal encampments.	1. Perform 52 annual cleanups for the duration of the Safe, Clean Water program to reduce the amount of trash and pollutants entering the streams.	\$4.1 million	\$4.1 million	100%
B5	Hazardous Materials Management and Response	Protect streams, groundwater and reservoirs from hazardous material releases.	1. Respond to 100 percent of hazardous materials reports requiring urgent on-site inspection in two hours or less.	\$3.3 million	\$0.5 million	15%
B6	Good Neighbor Program: Remove graffiti and litter	Maintains the aesthetic condition of District watershed assets by removing trash from creeks, repairing/installing fencing, and removing graffiti on District facilities.	1. Conduct 60 cleanup events (4 per year). 2. Respond to requests on litter or graffiti cleanup within 5 working days.	\$13.0 million	\$7.8 million	60%
B7	Support Volunteer Cleanup Efforts and Education	Support volunteer efforts through grants and partnerships for cleanup, education, outreach and watershed stewardship activities by others to: 1) prevent contaminants from entering surface or groundwater; 2) engage people in volunteer activities (clean-up, education, watershed stewardship); and 3) reach people with specific stewardship messages.	1. Provide 7 grant cycles and 3 partnerships that follow pre-established competitive criteria related to cleanups, education and outreach, and stewardship activities. 2. Fund District support of annual National River Cleanup day, California Coastal Cleanup Day, the Great American Pick Up, and fund the Adopt-A-Creek Program.	\$2.2 million	\$2.2 million	100%

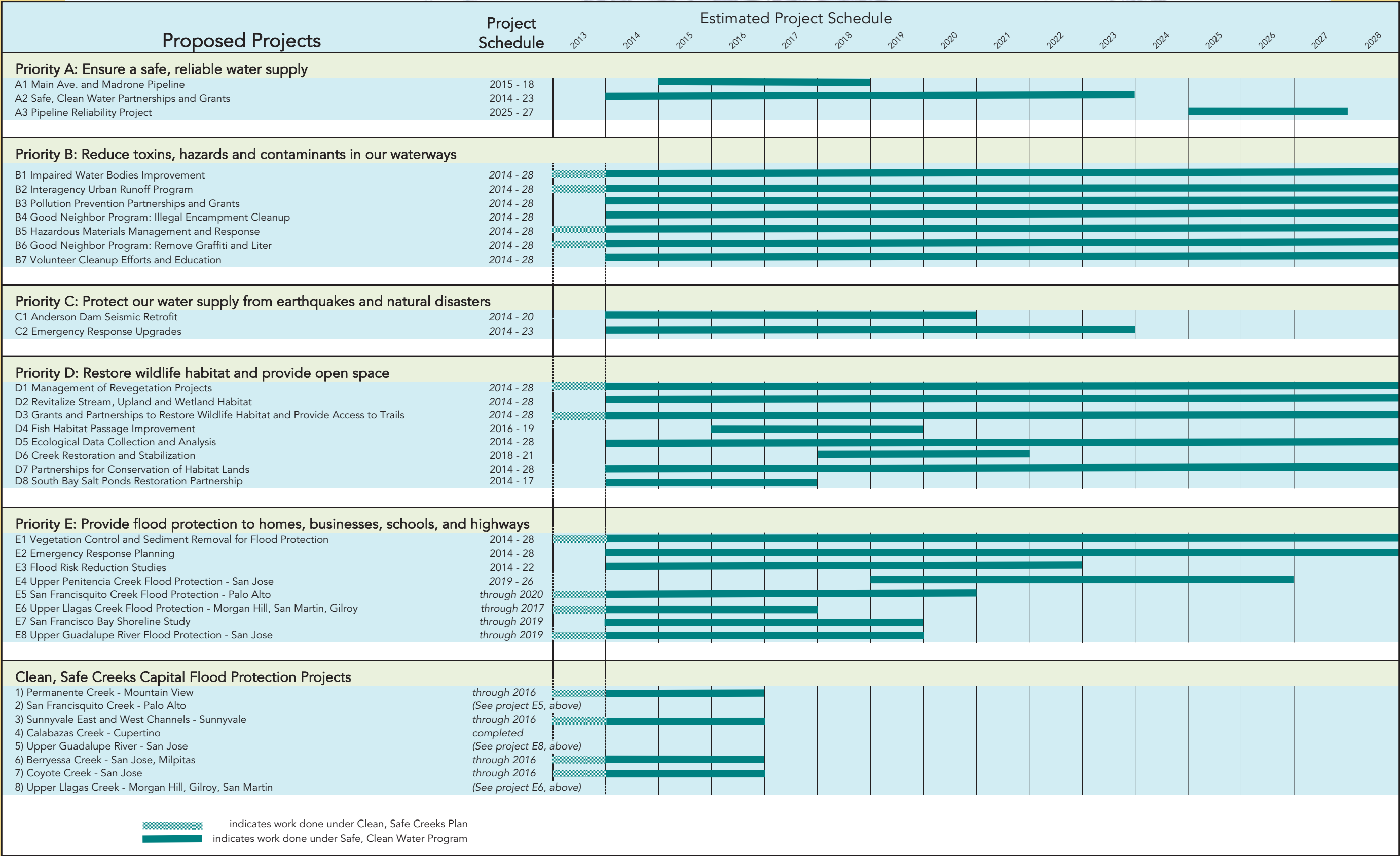
Chart G-1 Safe, Clean Water Projects Summary

Project		Project Description	Key Performance Indicator (KPI)	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water	Estimated Percent Funding from Safe, Clean Water
Priority C: Protect our water supply from earthquakes and natural disasters						
C1	Anderson Dam Seismic Retrofit	Conduct seismic retrofit of Anderson Dam to: 1) resolve seismic stability deficiencies to ensure public safety, 2) restore lost reservoir storage capacity resulting from seismic concerns; and 3) work with state and federal regulating agencies to bring dam up to compliance in a timely manner.	1. Provide portion of funds, up to \$45 million, to help restore full operating reservoir capacity of 90, 373 acre-feet.	\$110.0 million	\$45.0 million	41%
C2	Emergency Response Upgrades	Develop an automated flood warning system that will employ real-time rainfall data to predict stream flows, potential flood risk, and timing. Information would include delineating approximate areas subject to flooding. The information is disseminated to emergency responders, and to public via web, texting, auto-calls, etc., to alert proper entities for potential flooding event. Goal also includes a flood mapping component (with Coyote Creek recommended as first priority).	1. Map, install, and maintain gauging stations and computer software on seven flood-prone reaches to generate and disseminate flood warnings.	\$2.7 million	\$2.7 million	100%
Priority D: Restore wildlife habitat and provide open space						
D1	Management of Revegetation Projects	Carry out management and maintenance of revegetation projects to ensure that specific regulatory requirements and conditions are met at each mitigation revegetation site.	1. Maintain a minimum of 300 acres of revegetation projects annually to meet regulatory requirements and conditions.	\$29.5 million	\$17.1 million	58%
D2	Revitalize Riparian, Upland and Wetland Habitat	Revitalize the functionality of riparian and tidal habitat by removing invasive plants (including Arundo and Spartina) and revegetating where needed.	1. Revitalize at least 21 acres, guided by the 5 Stream Corridor Priority Plans, through native plant revegetation and removal of invasive exotic species. 2. Provide funding for revitalization of at least 7 of 21 acres through community partnerships. 3. Develop at least 2 plant palettes for use on revegetation projects to support birds and other wildlife.	\$23.9 million	\$14.2 million	59%
D3	Partnerships and Grants to Restore Wildlife Habitat and Provide Access to Trails	Provide environmental work to protect and restore habitats and encourage the return of endangered species. Create or restore additional wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife. Provide access to trails. Includes funding for developing a priority list of stream restoration projects.	1. Develop 5 Stream Corridor Priority Plans to prioritize stream restoration activities. 2. Provide 7 grant cycles and additional partnerships for \$21 million that follow pre-established criteria related to the creation or restoration of wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife, and providing new public access to trails.	\$23.5 million	\$23.5 million	100%
D4	Fish Habitat and Passage Improvements	Create favorable stream conditions to restore and maintain fisheries, including steelhead, by carrying out projects such as separating Ogier Ponds from nearby Coyote Creek and planning/design for restoration activities at Alamitos Creek near Lake Almaden. The project will also conduct studies of Steelhead streams in Santa Clara County with consideration for improvement of fish habitat, including use of large woody debris and gravel augmentation.	1. Complete planning and design for two creek/lake separations. 2. Construct one creek/lake separation project in partnership with local agencies. 3. Use \$6 million for fish passage improvements. 4. Conduct study of all major steelhead streams in the County to identify priority locations for installation of large woody debris and gravel as appropriate. 5. Install large woody debris and/or gravel at a minimum of 5 sites (1 per each of 5 major watersheds).	\$24.5 million	\$21.0 million	86%
D5	Ecological Data Collection and Analysis	Provide cost-effective, scientifically-based, and integrated information on stream ecosystem condition to help make informed asset management decisions.	1. Establish new or track existing ecological levels of service for streams in 5 watersheds. 2. Re-assess streams in 5 watersheds to determine if ecological levels of service are maintained or improved.	\$10.5 million	\$7.0 million	67%
D6	Creek Restoration and Stabilization	Increase the stability of stream channels through improvement projects that are based on sound geomorphic science principles; including projects such as Calabazas Creek (Comer debris basin), Stevens Creek, and Uvas Creek.	1. Construct 3 geomorphic designed projects to restore stability and stream function by preventing incision and promoting sediment balance throughout the watershed.	\$12.8 million	\$12.8 million	100%
D7	Partnerships for the Conservation of Habitat Lands	Provide funds for the acquisition of property for the conservation of habitat lands.	1. Provide up to \$8 million for the acquisition of property for the conservation of habitat lands.	\$24 .0million	\$8.0 million	33%
D8	South Bay Salt Ponds Restoration Partnership	Develop a long-term program in partnership with U.S. Fish and Wildlife Service to reuse clean sediment at environmentally appropriate locations to improve the success of the salt ponds restoration activities.	1. Establish agreement with the US Fish and Wildlife Service to reuse sediment at locations to improve the success of Salt Pond restoration activities. 2. Construct site improvements up to \$4 million to allow for transportation and placement of future sediment.	\$4.2 million	\$4.2 million	100%

Chart G-1 Safe, Clean Water Projects Summary

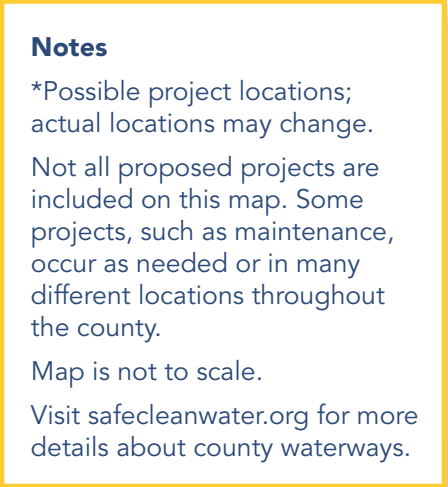
Project		Project Description	Key Performance Indicator (KPI)	Estimated Total Project Cost	Estimated Funding from Safe, Clean Water	Estimated Percent Funding from Safe, Clean Water
Priority E: Provide flood protection to homes, businesses, schools, and highways						
E1	(E1.1) Vegetation Control for Capacity	Maintain design conveyance capacity by managing vegetation at appropriate intervals. Maintain compliance with regulatory documents such as Operations and Maintenance manuals for modified streams throughout the county.	1. Maintain 90 percent of improved channels at design capacity. 2. Provide vegetation management for 6,120 acres along levee & maintenance roads.	\$111.1 million	\$35.6 million	32%
	(E1.2) Sediment Removal for Capacity	Maintain design conveyance capacity by removing sediment deposition at appropriate intervals.				
	(E1.3) Maintenance of Newly Improved Creeks	Maintain capacity of SCW flood protection projects (see Priority E Projects) upon completion of construction through vegetation management and sediment removal.				
	(E1.4) Vegetation Management for Access	Provide vegetation management (weed abatement, overhanging growth, etc.) for fire safety and for site access.				
E2	(E2.1) Coordination with Local Municipalities on Flood Communication	Work with municipalities to clearly identify roles and responsibilities for floodplain management and emergency management.	1. Coordinate with agencies to incorporate District-endorsed flood emergency procedures into their Emergency Operations Center plans. 2. Complete 5 flood-fighting action plans (one per major watershed).	\$3.1 million	\$3.1 million	100%
	(E2.2) Flood-Fighting Action Plans	Develop written, site-specific flood-fighting plans for creeks with less than one percent level of protection.				
E3	Flood Risk Reduction Studies	Develop engineering studies including hydrology, hydraulics, geotechnical and remapping work of the floodplain area. If appropriate, updated maps would be submitted to FEMA to more accurately reflect the floodplain. This project would include Alamitos Creek, Calera Creek, tributaries to Lower Silver/Thompson Creeks, and Coyote Creek at Rockspring.	1. Complete engineering studies on 7 creek reaches to address 1 percent flood risk. 2. Update floodplain maps on a minimum of 2 creek reaches in accordance with new FEMA standards.	\$7.9 million	\$7.9 million	100%
E4	Upper Penitencia Creek	This project partners with the U.S. Army Corps of Engineers to plan, design, and construct improvements along 4.2 miles of Upper Penitencia Creek from the confluence with Coyote Creek to Dorel Drive.	1. <u>With federal and local funding</u> , construct a flood protection project to provide 1 percent flood protection to 5,000 homes, businesses and public buildings. 2. <u>With local funding only</u> , acquire all necessary right-of-ways and construct a 1 percent flood protection project from Coyote Creek confluence to King Road.	\$139.5 million	\$41.9 million	30%
E5	San Francisquito Creek	Provide 100-year flood protection from San Francisco Bay to Highway 101, and 50-year protection upstream of Highway 101 to Middlefield Road with support and funding by regional partners. This project is sponsored by the San Francisquito Creek Joint Powers Authority, of which the District is a member agency, in partnership with the U.S. Army Corps of Engineers.	1. <u>With federal and local funding</u> , protect more than 3,000 parcels by providing 1 percent flood protection. 2. <u>With local funding only</u> , protect approximately 3,000 parcels from flooding (100-year protection downstream of HWY 101, 50-year protection upstream of HWY 101).	\$128.0 million	\$35.5 million	28%
E6	Upper Llagas Creek	This project continues a Clean, Safe Creeks 2000 project in partnership with the U.S. Army Corps of Engineers to plan, design, and construct improvements along 12.5 miles of channel extending from Buena Vista Ave. to Wright Ave., including West Little Llagas Creek.	1. <u>With federal and local funding</u> , provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat. 2. <u>With local funding only</u> , provide 100-year flood protection for Reach 7 only (up to W. Dunne Avenue in Morgan Hill). A limited number of homes and businesses will be protected.	\$105.0 million	\$39.0 million	37%
E7	San Francisco Bay Shoreline Study	The District is partnering with the California State Coastal Conservancy, the U.S. Army Corps of Engineers, and working with stakeholders to complete planning and design, and ultimately construction of improvements to the San Francisco Bay Shoreline. Initial construction is planned for Economic Impact Area 11 (EIA 11). Without federal participation, additional planning, design and construction cannot be implemented by the District due to limited available funding sources.	1. Provide portion of the local share of funding for planning and design phases for the former salt production ponds and Santa Clara County shoreline area. 2. Provide portion of the local share of funding toward estimated cost of initial project phase (Economic Impact Area 11).	\$223.0 million	\$20.0 million	9%
E8	Upper Guadalupe River	This project partners with the U.S. Army Corps of Engineers to plan, design, and construct improvements along 5.5 miles of Guadalupe River extending from I-280 to Blossom Hill Road.	1. <u>With federal and local funding</u> , construct a flood protection project to provide 1 percent flood protection to 6,280 homes, 320 businesses and 10 schools and institutions. 2. <u>With local funding only</u> , construct flood protection improvements along 4,100 feet of Guadalupe River between SPRR crossing, downstream of Willow Street, to UPRR crossing, downstream of Padres Drive. Flood damage will be reduced; however, protection from the 1 percent flood is not provided until completion of the entire Upper Guadalupe River Project.	\$320.6 million	\$18.3 million	6%

Chart G-2 Estimated Schedule for Safe, Clean Water Projects






A decorative graphic of water splashing across the top of the page, with bubbles and ripples in shades of blue and white.

# Countywide Map of Safe, Clean Water Projects



- Ensure a safe, reliable water supply
- Reduce toxins, hazards and contaminants in waterways
- Protect water supply from earthquakes and natural disasters
- Restore wildlife habitat
- Flood protection for homes, schools, businesses and highways

 Projects  
 Major Supply Pipelines for Santa Clara County  
 Local Creeks and Streams